THE BUILDER
A JOURNAL FOR THE ARCHITECT & CONSTRUCTOR

VOL. CXLVII SEPTEMBER 14 1934 No. 4780

SYNAGOGUE HOUSE, SEYMOUR PLACE, W : Detail of Entrance.

MESSRS. MEWÈS AND DAVIS, Architects.

MEETINGS

WEDNESDAY-WEDNESDAY, *September* 12-26.
Building Trades Exhibition. For functions at Olympia see page 448.

SATURDAY, *September* 15.
London Society. Visit to Bromley College and Bromley Palace. 3 p.m.

MONDAY-THURSDAY, *September* 17-20.
Association of Public Lighting Engineers. Annual Conference. At Aberdeen.

WEDNESDAY, *September* 19.
The Royal Sanitary Institute. Examinations for Associateship (in General Hygiene and Sanitation) and in Sanitary Science.
Incorporated Association of Architects and Surveyors (London and Home Counties Branch). Mr. H. A. Cox on "Where Timber Research Touches Architecture and Building." At 43, Grosvenor-place, S.W.1. 7 p.m.

FRIDAY-MONDAY, *September* 21-24.
Association of Special Libraries and Information Bureaux. Eleventh Annual Conference. At Somerville College, Oxford.

TUESDAY, *September* 25.
London Society. Coach Drive to Stoke Poges Church and Churchyard. 2 p.m.

THURSDAY-SATURDAY, *September* 27-29.
National Smoke Abatement Society. Sixth Annual Conference. At Glasgow.

MONDAY, *October* 1.
Institute of Official Architects. First Annual General Meeting. At Kingsway Hall, Kingsway, W.C.2. 7.30 p.m.

WEDNESDAY, *October* 3.
Institution of Sanitary Engineers. Opening Sessional Meeting. At Caxton House (Hill's Restaurant), Tothill-street, Westminster, S.W.1. 7.30 p.m.

THURSDAY-WEDNESDAY, *September* 27-*October* 3.
Garden Cities and Town Planning Association. Study Tour to Holland.

WEDNESDAY-SATURDAY, *October* 3-13.
Institute of Patentees. Tenth International Exhibition of Inventions. At Central Hall, Westminster.

FRIDAY-SUNDAY, *October* 5-7.
Town Planning Institute. Sixteenth Annual Country Meeting. At Birmingham. Headquarters at Queen's Hotel. Friday: Meeting. Saturday: Twenty-first Anniversary Commemoration Dinner.

SATURDAY, *October* 6.
Architectural Association. Mr. G. A. Jellicoe on "Building England: The Countryside." 3 p.m.

THURSDAY, *October* 18.
Institution of Sanitary Engineers. Mr. A. H. Waddington on "Some Studies on Water Purification." At Caxton Hall, S.W.1. 6 p.m.

FRIDAY, *October* 19.
London Society. Sir Henry Fowler on "Needless Noise." At 18, John-street, W.C.2. 5 p.m.

SATURDAY, *October* 20.
Architectural Association. Hon. Humphrey Pakington on "Building England: The Village." 3 p.m.

Photo: Sydney W. Newbery. From the Exhibition of Industrial Photography.

"THE KING AND QUEEN," BRIGHTON: PUBLIC BAR.

MESSRS. CLAYTON AND BLACK, AA.R.I.B.A., Architects.

(See page 423)

Architecture.

NATIONAL TREASURE

IT is curious that in these days, when on every side we see a growing appreciation of the importance of seemliness and beauty in the national life, we also read with monotonous frequency of the demolition of some fine old house, the breaking up of estates which have historic associations dating back through many centuries, and the constant appeals to the generosity of the few to save something for the enjoyment of the many from this march of the speculative builder. Change we know is inevitable, but the dissipation of these treasures is both foolish and wasteful: foolish because once they have been demolished no power on earth can replace the loss, and wasteful because they are national treasures, perhaps better appreciated by those who visit our country than by ourselves. It is therefore with wholehearted satisfaction that we welcome the suggestions recently put forward by one who not only has an appreciation of the artistic and historical value of the "stately homes of England" but is also competent to state the case for their preservation from personal knowledge of the causes which are operating only too speedily for their complete disappearance.

The Marquis of Lothian, in a recent address to the National Trust, said: "Not everybody, I think, realises how fast our treasures of this land, or rather the resources without which it cannot be maintained, are being dissipated. Under the Finance Act of 1904 the maximum rate of Estate Duties was 8 per cent., after the Budget of 1909 up to 1914 the maximum rate was 15 per cent., from 1919 to 1930 the maximum rate was 40 per cent., and from 1930 to the present day the maximum rate has been 50 per cent. None of the pre-war rates were fatal . . . the really high rates have only been in operation for about fifteen years. Nor has the full impact of the present system yet been felt. Heirs sell their securities or their books or their valuables before they break up their estates. But once sold, those assets cannot be sold a second time. Moreover, in the old days those houses were largely maintained by the yield of the agricultural property which surrounded them. But, as every landowner knows, since the opening up of agricultural export from the New World and the growth of direct taxation, the net yield of agricultural property has been immensely reduced." Lord Lothian went on to say that, looking at the situation as a whole, it is not an exaggeration to say that within a generation hardly any of the larger historic houses of Britain will be lived in by the families who created them.

What, then, will be their fate? It may be that some will be transformed into schools. country hotels or road houses, or perhaps, in a few instances, into museums for objects of local interest. But there can be little doubt that the greater number will disappear altogether, with their parks and gardens, and thus national assets of unappreciated value will be dissipated without, it would seem, any corresponding gain to balance the loss.

Here we may perhaps digress for a moment to make a brief reference to a similar problem in the only other land which can compare with our own in the number and artistic value of its country houses or *châteaux*. In France there are, as with us, country houses of various types ranging from the great historic *châteaux* of the valley of the Loire to the small manor houses of Normandy, Poitou and Brittany, to mention but a few of the districts in which these historic houses still exist, though, in point of fact, they are scattered generously over the whole countryside. Here, too, the owners of these houses, both great and small, have been hard hit by increased taxation and a decreased revenue, the latter perhaps more strongly accentuated than in this country. The owners of many of these houses are also faced with another difficulty because most of these are "classed" or registered as "Historical Monuments" and, as such, may not be altered or transformed without the permission of the State. It is true that small grants are made to assist in their preservation, but these grants, owing to present financial difficulties, are by no means adequate to the ever-increasing cost of necessary repairs. And the smaller houses are gradually but surely falling into disrepair and ruin—their once lovely gardens a wilderness, their furniture sold and their owners in the sad plight of being unable either to sell them or to afford to live elsewhere. But in the countryside of France, in spite of the Revolution, there persists an appreciation of the great house of the district as something which must be treasured and reverenced, not always directly expressed in words but still deeply embedded in the hearts of the peasantry. This, perhaps, has aided in the success of an interesting experiment, an association of the owners of historic houses which has courageously started to tackle the problem of preservation.

It exists, primarily, to organise the exhibition and preservation of these houses, and derives its funds from the sale of tickets to those who wish to visit them. Every sightseer must purchase a ticket from the association for a modest sum for each visit. This, with a well-organised but relatively inexpensive publicity campaign, has already provided a substantial fund for upkeep and repair, and, where the houses are untenanted, to provide a staff to conduct visitors over the *château* and grounds. The association is also seeking to obtain revision of taxation, and to find some solution of the difficulty which results from the existing law of inheritance, which requires that estates should be divided in equal shares between the children at the death of the owner. We have not space to refer to the problem in other countries, such as Austria, Hungary, or Italy, but in each it can be said that the appreciation of the historic houses as a national treasure is leading to efforts for their preservation.

Shall we, in Britain, so amply endowed with these possessions, be the only people who regard their dissipation with indifference? The question has only to be asked to provoke the necessary determination that something should be done before it is too late. But the questions which then confront us are, exactly what should be done, how is it to be done, and who should do it? And here we cannot do better than once again quote Lord Lothian's words:—"First of all," he says, "I think the Treasury might be induced to treat these houses on exactly the same basis as it now treats their contents . . . articles such as pictures, jewellery, furniture, or so forth, which are passed by the Treasury as being of national, scientific, historic, or artistic interest, are exempted from death duties unless they are sold . . . I venture to think that the house or gardens are every bit as valuable a part of the national treasure as the contents, and I do not see why houses which are passed by the Treasury as of special historic or artistic interest should not be treated in the same way. Secondly, I think the Treasury should permit inclusion in maintenance claims of all sums spent on upkeep, or restoration, or embellishment of such houses provided their historic or artistic character is strictly preserved. Thirdly, and much more important, the Treasury should exempt them from death duties even on sale, provided the house, gardens, and historic contents are preserved as a whole, and provision made for access by the public . . . Death duties should only be levied if the organism, so to speak, is broken up. . . . These concessions would cost the Treasury very little. I doubt if it would come to more than one or two hundreds of thousands of pounds a year."

These suggestions are practical and, coming from one who is the present owner of a famous house—Blickling Hall in Norfolk—as well as a former Minister in the National Government, should have special weight if backed up by public support. It is especially interesting to note that this scheme would not only preserve the houses themselves but would also maintain their setting—the parks and gardens, which add so much to their artistic and historical interest. If such a scheme could be combined with a national survey to determine precisely which houses merited exemption from taxation, well organised publicity through the various information bureaus which are already in existence in the areas of many local authorities, and an association of owners, organised for mutual assistance and to afford the public reasonable facilities for access (as, for instance, is already the case in many private gardens in connection with the *Queen's Fund for Nurses*) it is probable that many, if not all, our National Treasures could be permanently preserved.

NOTES

The New Premises and Centenary of the R.I.B.A.

It will be highly gratifying to members of the Royal Institute of British Architects to know that His Majesty the King, who is Patron of the Institute, has graciously consented to open the Institute's New Building in Portland Place, London, on Thursday, November 8. As our readers are aware, during November the Institute will also celebrate its Centenary. A conference will be held from November 21 to November 24, at which the President, Sir Giles Gilbert Scott, R.A., will preside. His Royal Highness the Prince of Wales has accepted the invitation of the Council to be present at the Centenary Banquet on November 22. The Conference will be followed by an exhibition, to be held in the new building, entitled "International Architecture, 1924 to 1934," and which will be opened on November 30. During the course of the exhibition the principal rooms of the building will be open for inspection by the public.

The R.I.B.A. Centenary History.

The R.I.B.A. Council decided that the centenary would be an appropriate time for the publication of a short authoritative history of the Institute. The book, which will be published on November 1, has been edited by Mr. J. A. Gotch, who has written the leading chapter, a general survey of the history of the Institute from 1834 to to-day. The eight other chapters have all been written by members of the R.I.B.A. who have been closely concerned with the spheres of work on which they write, and Professor H. S. Goodhart-Rendel has written a personal survey of English architects and architecture during the hundred years. It is stated that "though the history has been written by members of the Institute for members, it has not been allowed to become a tedious dry-as-dust record of facts, statistics and names of nothing more than professional interest. The events and personalities which have helped to develop the small Institute of thirteen London enthusiasts of 1834 into the vast imperial federation of to-day are great enough, in more than a merely professional way, to make the story of that development of real general interest, while for members themselves the story has, obviously, a personal interest which should be considerable. The illustrations in the book make an interesting record of the various Institute homes and of all the Presidents, whose portraits from the R.I.B.A collection are reproduced as a supplement, with short biographical notes on each man."

The Royal Society of Ulster Architects.

The Year Book for 1934-35 of the Royal Society of Ulster Architects (Incorporated), which has just been published, is an exceptionally well-produced work of reference for the use of members of the Society, the honorary editor of which is Mr. T. R. Eagar, F.R.I.B.A. The Society, the President of which is Mr. Thomas Houston, F.R.I.B.A., is in alliance with the Royal Institute of British Architects, and the 32nd Annual Report, which is published in the Year Book, contains a record of the many activities of the Society during the year. The work of the Public Relations Committee appears to be of general interest, for we learn that following suggestions from the R.I.B.A. for a closer relationship between architects and the public, a good deal of consideration has been given to the proposals, and at a later date recommendations are to be made for putting into effect the proposals on the subject. The Year Book appears to contain all that such a work should include to make it of service to members of an architectural society.

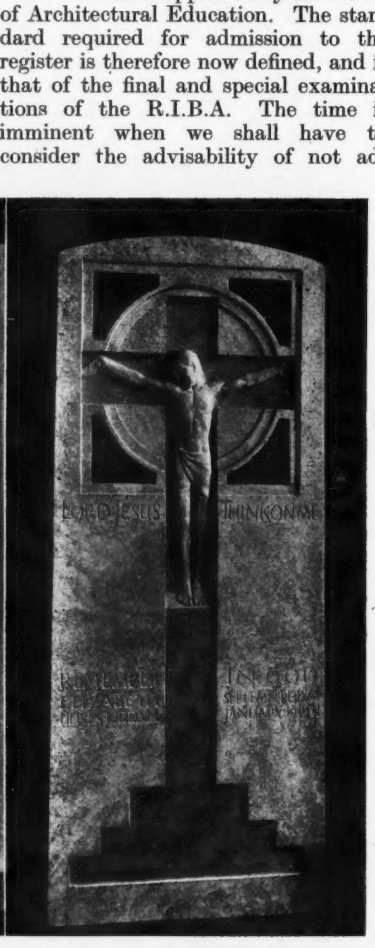
Registration.

From the Annual Report of the Society we take the following remarks in reference to the Registration of Architects :—"The Privy Council have now approved of the decisions of the Council recognising the examinations of eleven schools in Great Britain as approved by the Board of Architectural Education. The standard required for admission to the register is therefore now defined, and is that of the final and special examinations of the R.I.B.A. The time is imminent when we shall have to consider the advisability of not ad-

HEADSTONE : "PASCHAL LAMB." ANCASTER STONE BY MR. JULIAN P. ALLAN.

MEMORIAL IN HAMMERSMITH CEMETERY. BY MR. GILBERT LEDWARD, A.R.A.

(See page 423)



HEADSTONE : "CRUCIFIXION." ANCASTER STONE. BY MR. JULIAN P. ALLAN.

Architecture

HEADSTONE IN HOPTON-WOOD STONE. BY MR. GILBERT LEDWARD, A.R.A.

mitting any further members to our Society, who have not either qualified for registration, or become students in process of doing so. . . . Applications for registration have been received to the extent of about 13,000 and approximately 11,000 of these have been admitted to the register. Your representative has extended the benefit of his assistance to applicants for registration who are members of our Royal Society."

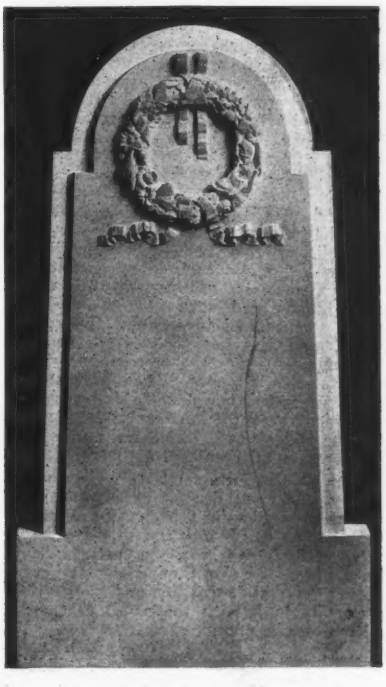
The Design of Tombstones. THE design of headstones for our churchyards and cemeteries is, we are glad to note, receiving a great deal of attention, and it is not too much to hope that the present discussion will result in an improvement both in the design of tombstones and of the material selected for them. The need for such improvement has long been realised by all observers with a sense of what is in good taste and who are familiar with the many beautiful headstones in our country churchyards, with their charming lettering, and the vast display of vulgar and often ostentatious tombstones seen in our modern cemeteries and burial places. An improvement should not be difficult to bring about, and it must come through the education of the public in the realisation of what is seemly in such memorials to the dead. We are glad to read that the Council of the Royal Society of British Sculptors are giving the subject attention, but as Mr. Reid Dick, R.A., President of that body, says, "It is to be feared that many of the large cemeteries are already marred beyond repair by the use of white marble and commonplace design; but many of our country churchyards are still unspoiled, and it is very desirable to avoid the inharmonious effect of this white marble in the mellow surroundings dominated by an ancient edifice."

The Preservation of Rural England. THE general interest which has become apparent in the question of preserving the amenities of the countryside is an indication that the public conscience has been stirred, and this is due in no small measure to the work of the Council for the Preservation of Rural England, whose seventh national conference is to be held in Southampton at the end of October, under the presidency of the Earl of Crawford and Balcarres, K.T. The conference will be held by the courtesy of the Mayor and Corporation in the Conference Chamber at the Civic Centre, Southampton. There will be three sessions during the conference (October 25-27) and papers will be read dealing with (1) Ribbon Development; (2) The Use and Abuse of the Countryside, with special reference to Countryside Wardens; (3) The Protection of Parks and Houses of Historic or Artistic interest, with special reference to the Protection of Trees and Woodlands. It is hoped to arrange a visit to the Ordnance Survey Works on Thursday afternoon, October 25, and in the evening his Worship the Mayor will hold a reception of members and delegates at the Pavilion on the Royal Pier. On Saturday afternoon, October 27, members and delegates have been invited by the Forestry Commission to visit the New Forest. The meeting is not confined to delegates and members of the C.P.R.E. —friends are invited.

The Late Roger Fry. A GREAT art critic has passed away in the person of Roger Fry, whose death at the age of 67 will be deeply regretted by a wide circle of artists. Slade Professor of Fine Art at Cambridge, himself a painter of sincerity and a scholarly contributor to the literature of art, it is true to say that the highest contribution which Roger Fry brought to life was his unbounded enthusiasm. His fiery championship of the "post-impressionist," Negro, and other "rebel" schools was invaluable, not because of the infallibility of the views he expressed, but rather because they had the much-needed effect of shaking the English art world out of the state of complacency in which the early years of this century found it.

This Freedom. WE can always reckon upon Mr. Robert Lynd as a stalwart friend of the best causes. His keen eye and sure and uncompromising pen are a national asset. In his book, "It's a Fine World," he tells us—"There are æsthetes and others so intent on saving the beauty of the countryside that they would deny an Englishman the right to build whatever kind of house he fancies in an old village street or to paint his petrol pump in the bright colours likeliest to catch the eye of a passing motorist. There are selfish motorists who cry for more and brighter petrol pumps, but it is improbable that any one will heed their cry. Life in a crowded country must be regulated to a degree for which there was no need in an emptier world, and men must be prepared to surrender a part of their freedom in order to be free to live in a country worth living in. We are beginning to see that it is intolerable that a man should be allowed to build a house without regard to the question whether by doing so he was injuring a neighbourhood. Individualism so complete, while it may make one individual happy, may make a thousand individuals miserable."

The Building Exhibition. ON another page we publish a report of the opening proceedings of this exhibition and notices of many of the interesting exhibits. We can already state that the exhibition gives promise of being of exceptional value and interest, for apart from the variety and number of the exhibits themselves and the practical way in which they are displayed on the many attractive stands—a large number of which are designed by architects—the exhibition will be a centre during the two weeks during which it will be open for various meetings and conferences of those associated with the Building Industry.



HEADSTONE IN HOPTON-WOOD STONE. Designed by MR. E. GUY DAWBER, A.R.A. Carried out by MR. A. J. J. AYRES.

A BUREAU OF BUILDING STATISTICS

We have received the following correspondence arising out of the leading article on this subject published in our last issue.

SIR,—The excellent leader on the need for a Bureau of Building Statistics which appeared in your issue of the 7th inst. was timely, and I heartily concur in the suggestion that the industry itself should take over this responsibility. It was the 1931 crisis which forced the industry to examine the position of the trade in detail, and the data collected, although collected in haste, was sufficiently convincing to alarm thoroughly the comfortably disposed people in the professions.

At that period of crisis the collection of data was forced on us, and much time and trouble had to be expended in research for the purpose of "getting the facts across to the public." We never know what crisis we may be called upon to face, and in the light of our 1931 experiences it becomes more and more important for the industry to have at call the vital figures of production or work in hand and projected.

At present it appears to be the business of no one in the building and allied industries to ascertain the facts of the trade, and the statistics now issued are unreliable and incomplete. It is, in fact, impossible to review the progress of the industry from the present method of presenting vital statistics, the monthly statistics of the Ministry of Labour being of no guiding use to anyone and of no value to planned industry. During the last few years we have seen the need for vital figures on demand.

In 1931 the operatives were the first to begin an examination of the statistics of the industry, as a result of the wholesale dismissal of workmen and the fast-growing unemployment roll. When the Federation's figures were published they caused public consternation, and doubts were expressed as to their accuracy because there appeared to be no check on them.

The mathematicians applied their minds to prove that the figures were incorrect, but without success, for, as a matter of fact, the amount of work declared by the Federation to have been shut down under the Government's economy policy was rather an underestimate. Following on this action of the operatives, the Building Industries National Council was formed, and that body attempted to make a statistical review of the industry, and from the facts coming to the light of day through the newspapers and trade and technical journals, the great campaign against shortsighted economy was carried through.

This having been achieved, are we to retire into our shells and await another crisis before we establish a Bureau of Statistics? If the building industry is ever to get a planned economy, then a start to collect statistical facts is imperative. The operatives know the value of statistics, and closely follow all published data such as the production of materials, wages costs in relation to production, company returns, new flotations, consolidations and amalgamations, building society finance and investment, the cost of money, and the published facts from the Government Department in regard to building. But this is a very difficult task and involves an enormous amount of research and an efficient press-cutting service from papers at home and abroad. A central authority is therefore a vital economy.

We must plan for a complete review, which will mean a great deal of hard work. The industry must be furnished with an up-to-date department of statistics, so that all connected with it can have the facts to hand. The result will be that the industry will know for the first time its position and the developments projected, with the result that order will replace the present chaos.

R. COPPOCK,
General Secretary,
National Federation of Building Trades Operatives.

London, S.W.4.

SIR,—One was very glad indeed to see the leading article in *The Builder* of the 7th instant, and there is very much that one would like to say in support of the suggested formation of a Bureau of Building Statistics. The subject was touched upon in the first report of the Council for Research on Housing Construction, which says at recommendation No. 4, on page 135: "The determination of housing policy is seriously hindered, and the accurate estimation of national and local housing needs is made impossible, by the lack of adequate statistical information on housing conditions. More serious still is the lack of clearly defined and nationally accepted minimum standards for housing, without which mere statistics are not of much practical use. The determination of standards and the improvement of statistics are matters of urgent and vital importance."

There can no longer be any doubt about the value of statistics as an essential guide to industry, and one is glad of the opportunity of following up your expression of opinion by practical suggestions.

An essential first step would most probably be the calling of a conference on the subject under the ægis of the Ministry of Health. The conference would explore the field of statistical research in the industry (having regard, of course, to work that has already been done on the subject), and would decide what statistics were necessary and what order should be observed in getting them together. The latter inquiry is essential, as long experience in statistical investigations has taught us that success in securing effective statistics depends upon an effective start on simple figures that are readily available and easily tabulated. More complicated and intricate investigations can be built up on a simple commencement, but a sudden plunge into complicated tables accompanied by the terrifying forms that lead up to such tables is almost invariably fatal.

There are three questions to be answered tentatively before such a conference could be called effectively, and these are:—

(1) Who should be called to the conference?

(2) Which organisation or department should do the work?

(3) Where would the funds come from to carry on the Bureau of Building Statistics?

As regards question No. 1, the Ministry of Health would probably wish to issue invitations as widely as possible; and as regards question No. 3, the precedent of the Department of Scientific and Industrial Research might be followed, and an income secured and assured by joint contributions from Government funds and from the industry itself.

C. ROLAND WOODS,
Joint Secretary, Council for Research in Housing Construction.

Artillery House, S.W.1.

SIR,—Your leading article in last week's issue, headed as above, is a timely warning as to the folly attached to the great want of stabilisation in the building industry, due either to acute depression or so-called booms; from the latter, unfortunately, compensation is not always found for the former, by reason of shortage of skilled labour and dearth of certain materials. Continuity and evenness of employment is to be desired from every point of view, whether of the professional classes, the builder, the manufacturer and purveyor of materials, or the craftsman.

The normal flow of building may roughly be divided into three headings—private enterprise in its many phases; housing and the like; and municipal building and the like. The first it is difficult and unwise to endeavour to control; the second is long delayed and very necessary now; and the third is an item that might well be used for filling the valleys of depression and levelling the hills of the boom period.

During the depression many skilled craftsmen were lost to the industry by the necessity of a change of occupation, and this, with a little forethought, might at least be mitigated, if not altogether cured. As an illustration, during the month of August there was a great dearth of painters, due to the large amount of school renovations, yet I can see no reason whatever why, with proper control, at least internal decorations of schools and similar public buildings might not be undertaken during the winter months, to the benefit of all concerned, and without detriment to the work.

Again, it is within my knowledge that in a district where my company has paid rates since 1868 there is, to all intents and purposes, a town hall suitable in all respects for the borough uses; yet a boom period is selected in which to build a new town hall. How very much better if this were postponed until a period of depression.

I am all in agreement with the obvious necessity of control wisely administered, and for that reason think the control is better in the hands of a semi-official body, with power to record, with recourse to a suitable Government Department, as, for instance, the Ministry of Health, with whom would lie the power of final determination.

It would be interesting to hear the opinions of others; but let us hope at least it will not end in correspondence and opinions only, but that some really effective system of registration and control will evolve.

F. J. GAYER.
E. A. Roome and Co., Ltd.
Hackney, E.9.

SIR,—There seems little doubt that the proper co-ordination of forward contracts would be of immense benefit to the building industry, manufacturers and consumers alike. Manufacturers could estimate possible requirements with a greater certainty, and this would lead to much greater stability in prices.

The setting up of a Bureau within the industry is possibly the more desirable, provided such bureau were vested with such powers as enabled it to secure proper returns from the 1,850 local authorities.

P. DONALD,
Managing Director,
Rownson, Drew and Clydesdale, Ltd.

London, E.C.4.

A correspondent interested in the manufacture of building materials writes:—

SIR,—I have read with interest your leading article on a proposed Bureau of Building Statistics. Certain points occur to me which invite criticism. Firstly, I cannot agree that "until a few years ago the building industry was quite indifferent to the need for organisation," particularly as no definition is given as to what is meant by "organisation," or whether the words "the industry" mean the builders or the manufacturers of materials, or both. Nor do I agree that the industry was rescued from "the perilous position in which the end of 1931 found it" by the efforts of the Building Industries' National Council. The building industry, like most other industries, was in a difficult position towards the end of 1931, due to the holding up of public works and to the uncertainty resulting from the then Government, the May Report, and other disturbing factors. The improvement since is surely due to the increase in public works in the shape of Government and municipal buildings, slum clearance, and small house building, resulting from a more settled political condition.

You suggest that the statistics at present available require amplification. The figure of 1,850 local authorities includes hundreds of rural areas, with populations of two or three thousand spread over many square miles; statistics of proposed building works in these areas would not be worth while. Also, there are many of those included in the

total of 1,850 who have no control over building. It is probable that the 146 authorities who now supply details cover most of the building work of any consequence.

Again, local authorities have no official knowledge of proposed building work until plans are lodged. Except in the case of very small work, the suppliers of materials usually know about the work often months before the plans are lodged, because it is customary to get prices in order to ascertain costs beforehand. The manufacturers of materials and the builders, through their agents or by direct inquiries, generally get information long before plans are placed with the local authority, and it is not thought that the same information at a later date would be useful.

A further objection is that there are already so many bodies depending for their upkeep upon subscriptions from the manufacturers of materials that a new bureau which would add to this really very heavy item of expense would probably not be welcomed by most of those who would be asked to contribute to its upkeep.

Lastly, I cannot agree with your suggestion that "the industry, through sheer inertia, is allowing too many of its obligations to be shouldered by Governmental bodies. Building research is a notable instance of this. . . ." An enormous amount of research work is going on in practically all trades, but the manufacturers prefer to do it themselves, and the results are not published for two reasons: (1) Because, in their own laboratories, the firms have men with life-long experience of their products, whereas if this work is done outside they first have to teach those who are to do the work; (2) because, under the present system, whereby each firm is striving to make dividends for its shareholders, each firm must necessarily try to make a better product than its rivals and retain secret the method.

True information (not a "forecast") of the demand to be expected a year ahead would indeed be of real value to builders and materials manufacturers, but it is difficult to see how it can be obtained unless we insist that plans be lodged and passed many months before the work is permitted to start!

COMPETITION NEWS

Municipal Offices, Swinton and Pendlebury.

The assessor in this competition, Mr. J. R. Adamson, F.R.I.B.A., has made his award as follows:—

First (£150): Messrs. P. Thomas, O.B.E., F.R.I.B.A., of Cardiff, and E. Prestwich, M.A., F.R.I.B.A., of Leigh (joint architects).

Second (£100): Mr. L. W. Thornton White, A.R.I.B.A., London, N.W.1.

Third (£75): Mr. H. J. Harding, A.R.I.B.A., London, S.W.3.

The winning design is illustrated in this issue.

Equestrian Statue Competition.

A competition open to all British sculptors is announced by the Government of Victoria. The subject is to be an equestrian statue of the late General Sir John Monash. The figure will be one and a half times life size. The designs and models submitted in England will undergo a preliminary selection and the five best will then be sent to Melbourne for the final judging, side by side with the Australian entries. The prizes offered are £200, £100, and £50, and particulars of the competition may be obtained from the Agent-General for Victoria, London.

CURRENT COMPETITIONS.

Civic Centre, Tunbridge Wells. Mr. E. Berry Webber, assessor. Premiums: £300, £200, £100 and £75. Conditions from Town Clerk. Dep. £1 1s.	Particulars published in "Builder." June 15	Sending-in date. Sept. 22
For municipal assembly halls, for Wolverhampton T.C. Mr. C. Cowles-Voysey, F.R.I.B.A., assessor. Premiums: £350, £250, £150. Conditions from Town Clerk, Town Hall. (Dep. £1 1s.).	April 20-27	October 1

GENERAL NEWS

Sculptured Memorials and Headstones.

The illustrations which we reproduce on pages 420, 421 are from a booklet published by Sculptured Memorials and Headstones, of 12, Lower Regent-street, S.W.1, an organisation which is doing much to improve the design of such features and to increase the use of British stones.

Professional Announcement.

Major Harry Barnes, M.T.P.I., F.R.I.B.A., F.S.I., chairman of the Town Planning Committee of the London County Council, is visiting Paris, Berlin, Vienna and Rome during this month to acquaint himself with the latest town planning operations in these cities. He will be accompanied by his son, Mr. T. S. Barnes, A.R.I.B.A., Town Planning prizeman of the Architectural Association for his year, 1924, and present Secretary of the Town Planning Committee of the R.I.B.A.

Autumn Art Exhibition, Liverpool.

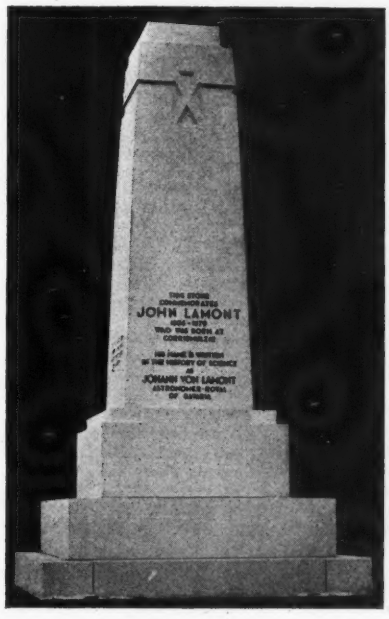
Liverpool Architectural Society announce that space for the Autumn Exhibition at the Walker Art Gallery is to be reserved for architectural drawings and photographs. It is hoped that members will avail themselves of the opportunity and help to make the exhibition as interesting as possible. Full information regarding the submission of exhibits will be found on the forms which are being sent to all members by Mr. Lambert, Director of the Art Gallery.

Proposed Town Hall, Blackpool.

The Town Clerk has reported to the Blackpool Corporation that he had communicated with the Royal Institute of British Architects requesting the nomination of an expert to examine and report upon the suitability or otherwise of certain sites for a proposed new Town Hall, and that the President of the Institute had accordingly nominated Professor S. D. Adshead, F.R.I.B.A., as such expert. The committee has accepted the nomination.

Middlesex County Annual Report.

The annual report for 1933 of the County Medical Officer of Health for Middlesex has now been issued. A complete analysis is given of the health of the county, the population of which has increased by nearly 55,000 persons between 1932-33. A number of important extensions were made during the year to various institutions coming under the Council's control. A notable audition was at the Central Hospital, where a new children's block, on up-to-date lines, has recently been completed. The County Medical Officer of Health is Dr. J. Tate, M.R.C.S., B.Sc., D.P.H.



MEMORIAL TO JOHANN VON LAMONT, TO BE ERECTED AT INVEREY, NEAR BRAEMAR.

MR. J. FENTON WYNESS, A.R.I.B.A., Architect.

Appointments Vacant.

Cardiff E.C. invite applications for post of Assistant Lecturer in the Welsh School of Architecture (Head of Department, Mr. W. S. Purchon). Applications, on forms obtainable from Mr. Williams, Director of Education, City Hall, to be sent by September 28.

Applications are invited by Worthing T.C. for post of Town Planning Assistant in the Borough Engineer's Dept. Salary £380, rising to £440 per annum. Applications, on forms to be obtained from the Borough Engineer, to be sent by September 22.

Applications are invited by Bolton T.C. for the post of Architectural Assistant in the Borough Engineer's and Surveyor's Dept. Salary £200, rising to £260 per annum. Applications, by September 20, to Mr. Harold B. Ashford, Town Clerk, Town Hall.

Applications invited by Bolton T.C. for the position of Temporary Assistant to the Architect for the Education Authority. Salary £270 per annum. Applications to Director of Education, Nelson-square, by September 30.

Newcastle-under-Lyme E.C. invite applications for the post of clerk of works to superintend erection of Abbots Way girls' school. Salary £6 6s. Applications by September 20 to Mr. G. C. Still, Director of Education, Moreton House, Wolstanton, Staffs.

EXHIBITIONS OF PHOTOGRAPHY.

Modern industrial photography, by members of the Professional Photographers' Assotion and the London Salon of Photography, is shown in annual exhibitions. It would appear from the exhibits that photography has reached as near perfection as possible. All that now remains is for these artists in photography—for artists they certainly are—to show their skill in the arrangement, composition and lighting of their chosen subjects. It is here their taste and judgment is on trial, though they emerge at these exhibitions with honours. At the first-mentioned exhibition the exhibits are for advertisement matter, scientific and illustration work. Much good architectural work is on view, both old and modern. Mr. Sydney W. Newbery exhibits ten large prints. The viewpoints of the subjects are chosen with mature judgment, and the lighting is also excellent, with many tone values which add to the perspective—notably in the case of "Morecambe Bay Hotel," the side elevation of the Masonic Temple, Braintree, and the public bar, the "King and Queen," Brighton, which we illustrate on p. 418. The architects for this work are Messrs. Clayton and Black, AA.R.I.B.A., and the whole of the decorations and furnishings were by Messrs. Heaton, Tabb and Co., Ltd. Mr. Harold Cox shows fine prints of "St. Mary's, Luton," and "A Side Chapel, Tewkesbury Abbey." Messrs. Bedford Lemere and Co. show "Bow Church, Cheapside," and "The Lounge, Grosvenor House"—prints full of quality. The poster section is striking, and some remarkable X-ray exhibits are to be seen. These exhibitions must enlighten those who visit them as to the great extent photography has aided and benefited them, if only from a scientific aspect.

The London Salon also has some beautiful pictures dealing with numerous subjects, including landscape, architectural subjects, figures and portraiture, such fine prints that it seems unjust to mention any particular prints to the exclusion of others. Strong appeal is made by the work of Mr. Chris. J. Symes, Mr. F. J. Mortimer, Mr. Ismay Taylor and others. Both exhibitions deserve a visit. The former, at the Prince's Gallery, Piccadilly, remains open until September 15, and the latter at 5a, Pall Mall East, until October 6.

ARCHITECTURAL STYLE TO-DAY—I

By G. MAXWELL AYLWIN, F.R.I.B.A.

Introductory.

THE many distractions of modern existence tend to establish policies and opinions which have hardly reached the stage of maturity. Men of serious thought find themselves subject to a frequently changing point of view; for as soon as an opinion has taken root in their minds, some new circumstance arises to modify the principles which, perhaps, in haste typical of the times, they had assumed to be basic.

The style of design which we have come to call "modern" presents a problem with regard to which there has been very considerable change of opinion, and it is, no doubt, the unusual way in which this movement has arisen that has led to misunderstanding on the one hand and headlong partizanship on the other.

The history of the movement is of peculiar interest. It is not strange that there should be a desire to express the social and material habits of the times in an art which is accepted on all hands as the greatest. That sort of ambition has been the mainspring of architectural achievement throughout the ages, whether consciously or as a natural outcome of method. All schools of thought are at one in this ambition.

In this country each style, from Norman times up to the Renaissance, developed as the outcome of fresh structural ambitions. The pointed arch was not just an academic shape, but was the solution of an orderly vaulting problem; the strength of Gothic design rose and fell in proportion to the urge of that ambition. The mature Early English was the peak of the movement with the ingenious but less sincere Perpendicular, marking its rapid decline. In contrasting form of development, the Renaissance marked the first appearance in this country of a deliberate academic choice. The marvels of ancient Rome spread their fame throughout Europe, reaching this country a century or more after others; but it was this admiration for an ancient civilisation and the desire to replace the seemingly fortuitous growth of mediæval architecture with the splendid orderliness of a great people that created the impulse to the mature classic language of Jones and Wren. From their days architectural design became a matter of deliberate choice, and out of that freedom from age-long tradition arises the free thought of the modernist.

But it must not be imagined that this so-called "Modernism" is another Renaissance, for it differs very widely from that movement; in fact, it is in many ways directly opposed to much that was essential in the classic movement.

"... THE ORDERLINESS OF A GREAT PEOPLE."

The "Modernist" Creed.

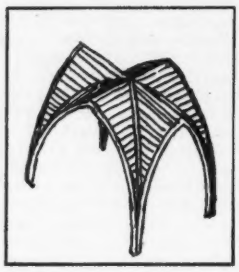
The Modernist professes to shake himself free of the restrictions and limitations which govern the designer in classic motives. He professes to be inspired only by the natural methods by which the builder of to-day constructs the efficient building. In order to design with this motive, the first essential is to decide what is the right method from a utilitarian point of view in which to build. Modern building construction in the larger type of building differs widely from that of the last century. The wall builder has given place to the frame builder in much the same way as the domestic frame builder of the 18th century gave place to the domestic wall builder of the 19th century. But with the small building the masonic method still holds the field, despite the many efforts which commerce has made since the war to apply the frame principle to the small house on economic lines. The conditions favouring success in this direction were indeed great, for at the time of greatest demand for housing accommodation in the years immediately following the war, the traditional materials of wall building were in great scarcity. Yet

"... MORE EVIDENCE THAN CAN BE IGNORED."

there was no victory for new methods, and in face of such evidence we have to assume that the only practical and economic way of building small houses to-day differs very little from that followed for many generations.

Are we then to assume that architectural design must be divided into two processes; one to apply to the big structure and one to the small? Are we rather to encourage some reflection of the style of the more important section to show itself despite natural practice upon the less important? These are, broadly, the lines of thought which divide the Modernist from the Traditionalist in the field of domestic architecture. But we should be doing but half justice to the Modernist if we left his case at this point. Modernist design is also a revolt against hindering traditions, and, regarding the question from this aspect, designers of to-day stand shoulder to shoulder. They are not content with the dignity of a colonnade if it must be paid for by loss of space and light and a vast outlay in money. They are not content to dress the essentials of a building with ornament which has ceased to have a meaning. As a reaction against this sort of thing, the stark crudity of extreme modernism stands out; and it is only fair to thank the free thought which has shaken off the chains of habit for the cleaner lines with which the Traditionalist now handles the classic *motif*.

It is clear, therefore, that if we are to do justice to the new movement, we must discourage it from indulging in a new sort of affectation which may in turn prove more destructive to the beauty of natural design than the insincerities of the more thoughtless of the Traditionalists.



"... NOT JUST AN ACADEMIC SHAPE."

An Architectural Belief.

Every style must grow out of some sense of construction, either directly or by deliberate selection. For instance, the Greek temple arose directly out of the construction of posts and beams. Yet the choice open to the designers was much wider than the style admitted. The Greeks must have known of the arch and the vault, but these were deliberately excluded from the construction with academic intention. Thus, we have two elements in evidence in architecture—the design limited by the possibilities of the construction adopted and that stamped with a character arising out of a free sense of choice.

Pure Functionalism Insufficient.

The Gothic vault arose also out of this designing sense, for the round-arched ribbed vault of the Romanesque period achieved the job of roofing a space in stone quite efficiently, though an æsthetic choice demanded the level ridge as the more satisfying form to view. Out of this arose the pointed arch as the characteristic of the style. It is from this that we gather the insufficiency of the purely "functional" motive. Construction alone cannot produce fine architecture, but there must always be some sense of æsthetic choice limiting not only the applied ornament but also the way of building materials together. Our reflection upon Modernism must, therefore, face in both directions. We have to appraise the style by the deliberate choice which the designer makes in his way of assembling constructional units, and we have also to consider the way in which he expresses or dresses his self-chosen constructural method. It will be by these means that we arrive at some sense of the sincerity of a movement which has produced more evidence than can be ignored.

On the other hand, we must remember that any new thing receives greater publicity than more familiar things of equal size and importance. When we find the pages in many of the illustrated journals and periodicals, technical and popular, filled with illustrations of Modernism, we must not jump to the conclusion that this movement necessarily represents majority opinion. Nor must we assume, on the other hand, that, if we conclude that this is no more than a minority opinion, it can be ignored on that account either; for a pioneer movement must of necessity be the minority movement at the outset. Its importance is expressed rather in the ease with which it spreads into a wider field of thought.

It is with the object of extracting from the new movement the lessons which it can teach all schools of thought that this series of articles has been written, and for the reason that by the unfortunate temperament of designers, the subject is generally treated with far too much prejudice and heat.

South-West Essex Technical College.

Sketch plans for the erection of the proposed Technical College in South-West Essex, at an estimated cost of £135,000 for buildings and £800 for salary of Clerk of Works, have been approved for submission to the County Council and the Board of Education. Plans have been prepared by Mr. Jno. Stuart, F.R.I.B.A., County Architect, Chelmsford.

PHILIP WEBB (1831-1915) AND MODERN BUILDING.

By A. C. SEWTER.

A MODERN architect, faced with the problem of how to build, does not find its solution easy. Forty or fifty years ago, during the war of the styles, that problem must have been even more terrifying; yet it was from that battlefield that Webb propounded his solution. That solution is neither a simple one nor altogether free from apparent contradictions, but it is one which deserves more attention than has been generally afforded it.

The principal cause of this neglect is, of course, that Webb himself never gave a systematic account of it, being fully occupied with what was, after all, his job—namely, building. Professor W. R. Lethaby, in a series of articles in these columns in 1925, gave what is still almost the only account of Webb's life and work[1] in the course of which he devoted a chapter to Webb's architectural theory. Lethaby's account could scarcely be improved, and certainly not in a short article such as this; but it would be useful, I think, to examine Webb's theory in relation to more recent architectural and social developments, and attempt to determine its present value. This is my aim here, and first of all I will sketch briefly Webb's point of view, using as sources Professor Lethaby's chapter and a number of Webb's own letters.

According to Webb, building is a craft; and if it is to be good building, the builder must be a traditional craftsman. That sounds very simple, but let us examine it more closely. First, building is a craft—that is to say, it moulds materials to some purpose. In purpose and materials the builder must find his two starting points—his data. It would be idle to pretend that Webb made as much of the conception of purpose as modern theorists of architecture, but it is a fact that he was the first modern architect to resort to this craftsman's view. Nothing without purpose was to go on Webb's buildings; no more ornament than was necessary. If a ventilator was required, then he expended all his efforts to design a good ventilator that he could be proud of—a craftsman's ventilator. And when that was done, he refused to hide it, but placed it openly and frankly where it was wanted, without ornament or addition. That was a very remarkable thing to do fifty years ago. His sheer thoroughness led Webb to make a special study of sanitation, ventilation and lighting, since he realised that a less than perfect drain or flue or window simply failed to fulfil its purpose.

Again, building requires materials, which themselves make certain demands and impose certain limitations on their users. The builder must know all about these limitations, all about the special qualities and weaknesses of the tools he uses. Doubtless every builder and architect to-day who is worth his salt realises this and has done something about it. He has studied, perhaps, the various types of bricks and of bonding, the wearing qualities of different stones, mortars and cements under given conditions, and so on. But craft knowledge of the extent and profundity of Webb's must be rare indeed, if at all possible nowadays, which I doubt. It is now too late to discover how he acquired it, but it must have been largely through personal contacts with labourers and craftsmen of the old type, men who had learned all the tricks of the trade from their fathers and grandfathers, and perhaps added one or two themselves—in fact, from the true traditional craftsmen, now almost disappeared. When Webb said that building is a folk art, that is what he meant—that it depended on folk, or traditional lore.

Already in Webb's time, however, the traditional lore of the builder was almost gone. That was the trouble. You could not say to your workmen: "I want two windows in that wall," and leave the rest to them. Or, at least, if you did the results would be pretty disastrous. In Mr. Eric Gill's phrase, work was divorced from responsibility, and consequently there was no way of ensuring that work would be well done, unless the architect shouldered the whole load of responsibility; which is what Webb did. He designed everything, down to the smallest moulding. He planned out everything and then used his workmen like so many machines to carry out the plan. Webb did not like that method—he was forced to employ it, and tried to make the best of it. He entertained the utmost contempt of those "successful architects," whose prime object in designing was to make the design itself look nice and to win competions, and who undertook more work than they could properly carry out. Webb himself would refuse a client rather than have so much to do that he was unable to supervise every detail. His clients had to leave everything to him. If he thought that a prospective client would have ideas of his own when it came to the point of actually building, Webb would politely suggest that he might do well to try another architect. Such conscientiousness is perhaps too angelic for a commercialised world; nevertheless Webb was able to live fifteen years in retirement without too great hardship.

Webb's conception of tradition implied that, if his workmen lacked traditional craft, then the architect must have it: and Webb had it. He learned, not only from the craftsmen who yet remained, but also from the buildings earlier generations had erected. He took care to use local materials wherever possible and to use them in the local manner. This was not a matter of imitating the buildings of an earlier period; in fact, there was nothing which Webb condemned more heartily than such imitation. It was a question of making the new building look as if it were a natural product of the soil and of the other buildings the soil bore. He took hints from older buildings for his details—a window, door or roof—but the general effect was the joint product of purpose, materials, and tradition.

Now suppose one admits, as I feel it to be necessary to admit, that these methods were perfect for the period 1860-1900 in which Webb worked, the question remains how far they are applicable now. Mr. Kenneth Clark has asserted his belief that Webb's position was essentially similar to that of M. le Corbusier, but I cannot agree with him. In his insistent demand for complete freedom from control by patrons, and complete freedom in his design from any restraint imposed by conceptions of style, Webb was undoubtedly giving expression to an aspect of nineteenth-century liberalism, while M. le Corbusier's building is perhaps the perfect expression of the very distinctively twentieth-century movement of rationalisation. The ideology of liberalism belongs to the past, and it is unlikely that anyone will return to Webb's methods. The complete control which he (and, incidentally, Street also) exercised leads to a highly individual and personal architecture which does not please modern taste. Nowadays we need an architecture which will impose some restraint on the designer—some *askesis*, as Mr. Eric Gill puts it. That is to say, our buildings must reflect group rather than individual character. Webb realised this and admired the "barbaric" character of Romanesque architecture. A Romanesque or early Gothic church, or barn, or cathedral is a communal product, and shows it. Webb was, I think, one of the first to shift his architectural Golden Age back from the thirteenth century to the twelfth.

What Webb would really have liked was an utter change of the whole social system. He was a Socialist, and he believed Socialism to be essential to good architecture, or, rather, to good building. Although he was forced by the nature of the society in which he lived to work mainly for rich men, Webb had a conscience about it, and would undoubtedly have preferred to work for people of his own class or on public buildings.

It appears, then, that Webb was in revolt against the social and architectural conditions of his own age; and since then many changes have occurred, of which some are favourable and some unfavourable to the application of Webb's methods and ideas. Let us now examine a little more closely these principal modern developments.

In an age of rationalisation we naturally require a strictly rationalised architecture, from which individual vagaries of taste will be banished, or at least confined to such ornamental details as sculpture or interior fittings. But, of course, the whole of society is not yet rationalised. Although the ideology of the whole of society must by now have been in some degree affected by the movement, it is only in commercial architecture and in the houses of business men that we should expect to find the clear expression of the rationalised æsthetic. Perhaps architects such as M. le Corbusier, Dr. Wells Coates and Mr. Colin Lucas provide us with the perfect type—or, still better, perhaps, Gropius. Historically and æsthetically these may be—and probably are—more important figures than all other present-day architects together, but no one can claim that they are anything like representative examples of the whole of modern architecture.

The unrationalised bulk of the population still demand a more irrational and personal type of building, whether for their own dwellings or for business houses still operating under the older methods. Even here, however, tinges of rationalisation in the form of labour-saving devices and relative strictness of form begin to appear. For this type of demand nothing could be better suited than Webb's craftsman's house, bearing signs of the designer's individuality, and thoroughly efficient throughout. The great difficulty is, of course, that the class of persons for whom they would be intended could seldom afford them. That is the direct result of that lack of traditional skill which Webb himself so often lamented, and the only way of overcoming the difficulty would be to attempt to supply that skill, to remove the necessity for the expensive labour of the architect-designer, and substitute for it the less costly labour of responsible workmen. It is, of course, out of the question to discuss at length here how this might be brought about, but it would, perhaps, not be out of place to make two brief suggestions. Firstly, the reintroduction of the apprenticeship system into the building trade would do something at least to remedy the lack of proper equipment amongst the bulk of those responsible for the actual erection of buildings. In the second place, the main factor determining the nature of the ordinary middle-class house at present is the desire of the builder to erect it as cheaply as possible, at the same time making it look as expensive as possible. This being so, one naturally finds a great deal of showy surface work, façades, etc., and the poorest workmanship behind. So long as the control remains in the hands of the contracting builder, this will remain true. Control must be transferred either to the consumer or to some body with a less predominantly commercial interest. Householders' associations might serve the purpose or, better, something akin to the town-planning committees, but with more positive powers.

Webb's own manner of building is obviously inapplicable to modern factories or city offices; sheer scale and technical advances have ruled it out. For middle-class houses, as I have said, Webb's general method seems to me ideal; but this statement requires some explanation. The exclusive use of local materials is, in the first place, often too expensive, and in the second place it

(1) The exception being a short appreciation by Mr. George Jack in "The Architectural Review," July, 1915.

is rather absurd to pretend that transport facilities are now in the same state as when the oldest remaining local houses were built. That is what the use of local materials ultimately amounts to. Very few districts in this country can still retain any real measure of local autonomy in building style; they are not sufficiently isolated or out of touch with the rest of the world. It is now the normal state of affairs for an architect working in Cornwall to have been trained in the same way, if not in the identical school, as an architect from Lancashire, and few building practices are so restricted in area that an architect would work in only one local style. Once that state of inter-communication exists, local style is largely make-believe. The deliberate cultivation of local tradition, except perhaps for cottages and farm-buildings, is, if I may put it so strongly, sentimental nonsense. But in saying this I am, of course, merely exemplifying the influence of the spirit of rationalisation.

Tradition in the wider sense, however, is altogether another matter, and this for two reasons. First, the detailed knowledge of how to use various materials, a far more complex subject than might appear, has depended in the past on traditional lore, now largely lost. To prevent its complete loss we want, as Professor Lethaby has written, "a record of existing building methods and traditions of workmanship, as they are still carried on in their several localities in relation to the materials at hand." In the compilation of such a record, Philip Webb's letters would be of the utmost importance, containing as they do accurate statements on innumerable points of minute technical knowledge.[2]

The second reason for the importance of tradition is more difficult. To quote Professor Lethaby again, "Things designed by a single mind are mostly 'sports,' which must quickly perish. Only that which is in the line of development can persist." This conception of tradition is a fundamental of modern criticism, not only of architecture, but also of poetry and literature in general. It forms the basis of all the critical writing of Mr. T. S. Eliot, and of a great amount of Mr. Herbert Read's. Its corollary is the conception of contemporaneity. A short excursus will make this clear.

If I go and live, even in the depths of the country, in a steel and concrete house, I feel myself to be a citizen of the world. My house would express my relationship with the world at large, and, in particular, with the cosmopolitan life of the business and leisured classes. It would tend also to separate me from the local population living in brick-built or freestone houses. The house would be contemporary in spirit, and, if one takes a wide enough view, including the whole society or societies with which I or my architect maintained relations, it would be traditional in the sense that it naturally follows what has gone before. A true revolution in the arts is an impossibility, since men's ideas and tastes change only slowly. The architecture of Gropius may appear revolutionary in the extreme, but it is traditional in this sense, that it is the natural result of forces which have been operating for some time past; forces which showed themselves first of all in the work of Street and Webb, proceeding through innumerable stages of development before reaching their present position.

This conception of tradition cannot be twisted into a defence of the modern "period" house. That is a product of other than pure æsthetic traditional forces. Not everyone wants to feel himself a citizen of the world, and while nationalism persists, houses for patriots will be erected. They will not be traditional, nor rational. Our most national style of building is the Tudor; therefore, I suppose, we must continue to suffer from twentieth-century Tudor monstrosities. They will necessarily be monstrosities because the traditional knowledge which served in the erection of genuine Tudor buildings no longer exists. They will be neither traditional nor contemporary, but mere imitations.

It may seem that my claim for Philip Webb is not a great one, but I am convinced that if 50 per cent. of modern builders had (1) Webb's knowledge of building craft, (2) Webb's understanding of tradition, and (3) Webb's conscientiousness, then modern building would be changed greatly for the better.

(2) The Courtauld Institute of Art now possesses a lengthy correspondence between Webb and Giacomo Boni, the restorer of the Forum at Rome; and also a number of letters to Webb from George Wardle, at one time manager of Morris and Co., principally concerning matters of archæological interest, and almost equally instructive. Mr. William Weir, of Letchworth, Herts, also possesses some letters from Webb to himself dealing principally with technical matters concerning old buildings which Mr. Weir was engaged in repairing.

NEWS THEATRE, WATERLOO STATION, S.E: View from top of External Staircase.
MR. ALISTER G. MAC DONALD, A.R.I.B.A., Architect.

"THE BUILDER" DEBATE

LXXVIII.—AN ARCHITECTURAL EXHIBITION.

"That the R.I.B.A. should organise a large-scale architectural exhibition, open to all British architects, and comparable to the Building Trades Exhibition."

SIR,—Times have changed very considerably since the dignified days of Queen Victoria, and though dignity may often be a virtue, there is no doubt that at other times it becomes little more than a pretence. In the last century the practising architect of standing and artistic ability was rare, but with the marked advance in architectural education which has taken place in the last twenty or thirty years, there are now more capable architects spread about the country than there is work available for their occupation. If architectural practice is not to become a dog fight based on the survival of the fittest, in which unseemly struggle many capable men must go to the wall, the field of practice must be extended to give occupation to all men of worthy standing.

This can only be done by educating the public, and already attempts are made to set about such an educational campaign. The atmosphere in which this campaign is conducted, however, is so very professional that the public is not attracted. Lectures given at professional headquarters bring a few cultured laymen to listen to a gospel to which they are already converted. The ordinary sceptical Philistine does not set his foot upon such well-preserved ground. Exhibitions of drawings, such as the R.A. Summer Exhibition and the various R.I.B.A. shows, also by-pass the unimaginative man in the street. The R.A. Exhibition is swamped with more sensational work by allied artists. The R.I.B.A. Exhibitions are set up within the walls of a prison as far as the ordinary man is concerned. What we want is something big enough to grip the imagination of the public, and striking enough to carry a message across the deep gulf which separates the initiated from the ignorant. The Building Trades Exhibition is a function of the scale and importance which I have in mind, and the idea of renting Olympia does not strike me as madness.

One has only to count the membership of the Institute and to imagine the average output of its members to realise that the vast arenas at Kensington might be filled if architects seized the opportunity when presented to them. Architectural draughtsmen are able to portray fine architecture in terms easily understood by, and appealing to, the general public. The use of models is also a suitable exhibition medium. I see no reason, either, why one or two houses or fragments of buildings should not be modelled full size, in such a setting and in the same way as we see at the Ideal Homes Exhibition.

The cost of such a project need not appal us, for we can seek comfort in the balance-sheet of the Institute. I am sure also that donations will be forthcoming even more readily than has been the case in support of the new premises. I have no doubt that the idea will suggest self-advertisement, but I am sufficiently of this century to feel that advertisement is no longer the undignified and vocal exercise which was once the case, and against which the architectural profession has set its face. The chief idea is that we have no right to continue to train young men for the profession in large numbers unless we are prepared to do something constructive towards creating an adequate market for their services. POSITIVE.

THE BRITISH ASSOCIATION

The annual meeting of the British Association for the Advance of Science commenced in Aberdeen last week, when a number of subjects of interest to the constructional trades were discussed. Points from various papers are as follows :—

Electricity and Production Cost.

The possibility of getting cheaper electric power, largely by the use of "waste" coal, was the subject of Professor F. G. Baily's presidential address to the Section of Engineering. He came to the general conclusion that changed conditions had made the establishment of generating stations at pitheads and coal-cleaning floors a much more practical scheme than it was even ten years ago, when the Commission appointed by Mr. Lloyd George made its report. The general idea of the scheme of production of electric energy here proposed took, he said, as its basis the complete linking-up of all parts of the country by the grid and the subsidiary lines fed from it or from the stations directly. All stations were connected to the grid, and as well as supplying their local consumers, put the additional power into the grid as required. That was the well-known main function of the grid. It was submitted that that led to a different scheme of generation from that now followed, and that sources of cheap power were rendered available that previously could not be utilised economically. Taking a distance of 40 miles as still within the neighbourhood of the coalfields, the speaker said that most of Great Britain and two-thirds of its population was within the limits. London was outside, but could be omitted as a special case. At all the coalfields there was a large amount of "waste" coal which could be used for the production of electricity. Owing to technical improvements, the absence of cooling-water in large quantities need no longer be regarded as an obstacle to pithead production. Industrial steam could also be used for the production of cheap electricity.

Electric lighting was now so general where a supply was available that no great increase was to be expected by a reduction in price. Motive power in factories was now supplied to the extent of one-half from electric mains, and a considerable part of the other half from private plant where industrial steam was required and a steam generator easily added. These might come into the general scheme, but would not greatly increase the public demand. As comparatively little developed directions for new demand there were domestic heating of all kinds and the electrification of railways. Electric cooking, hot-water supply and house warming would have to be brought down to a figure not greatly exceeding that involved in the consumption of raw coal if anything like a general adoption were to be brought about. A figure of one halfpenny began to be persuasive, but above that the added convenience would not outweigh the cost in the eyes of most people, and even that figure only met the competition of gas on equal terms if the price of gas were eightpence a therm, and there were many signs that that might be reduced.

In concluding, the speaker said that the process of introducing these new supplies need not be sudden or simultaneous at all parts, nor need the existing stations be hastily discarded. What was required was a policy of making all extensions of power at pithead stations, and allowing a natural development of that policy as was found good. The closing down of the present small stations, and the normal rate of growth, would give opportunity for a large-scale trial in a few years, and, commencing with the most suitable places, the process could be steadily continued. Every improvement in methods of transmission would place the pithead station in a stronger position for the supply to large towns.

Management of Forests.

Aspects of forest biology were raised by Professor Borthwick, Professor of Forestry in the University of Aberdeen, in his presidential address to the Botanical Section. Much of our prosperity, he said, depended on the forest, and the consumption of forest products and the destruction of forests was increasing at a rate which was giving rise to serious apprehension as to the ability of the forests to withstand increasing and continued unscientific exploitation. How best, he asked, could we manage and develop our woods so that the demands for different species of timber, sorts and sizes of the highest quality possible, might be met, and adequate provision made for the regeneration of these woods, without loss of time and without deterioration to the productive capacity of the soil, and at the same time make as full use as possible of all growth factors, without interfering too much with the natural laws of forest growth? The solution suggested by Professor Heinrich Mayr, of Munich, seemed to him to fulfil all those requirements. Professor Mayr's suggestion was to compromise between the economic objects of man, the user, and the natural laws which governed the designs of Nature, the producer. He suggested that the forest should be made up of small compartments, 1 to 8 acres, each compartment to consist of one species. Those small pure compartments would be scattered as much as possible. There would thus be a forest of mixed small compartments differing in age and species. Due attention would be given to assigning each species to its most suitable soil and exposure.

Notification of Well Sinking.

At a meeting of delegates of the Societies in Correspondence with the British Association, Sir Albert Kitson urged that it should be made compulsory to notify the sinking of wells and borings for water. Water had always collected in the London Basin because of the chalk soil, and for that reason centuries ago wells had been dug in London, some of which were still being used. Now, however, the level at which water could be reached by boring in London had gone down, showing that the water in the London Basin had decreased. The present summer had shown the danger of prolonged drought if water continued to be taken from the London Basin. The present level of water was unable to resist the pressure of Thames water, which was coming in and polluting, in some parts, the lower portion of the Thames Valley. Lack of rain had led to a mass of chalk and gravel drying up, so that not merely a normal season, but one or two abnormally wet seasons, would be necessary before the water could do anything to replenish the main reservoir.

Technique of Economic Change.

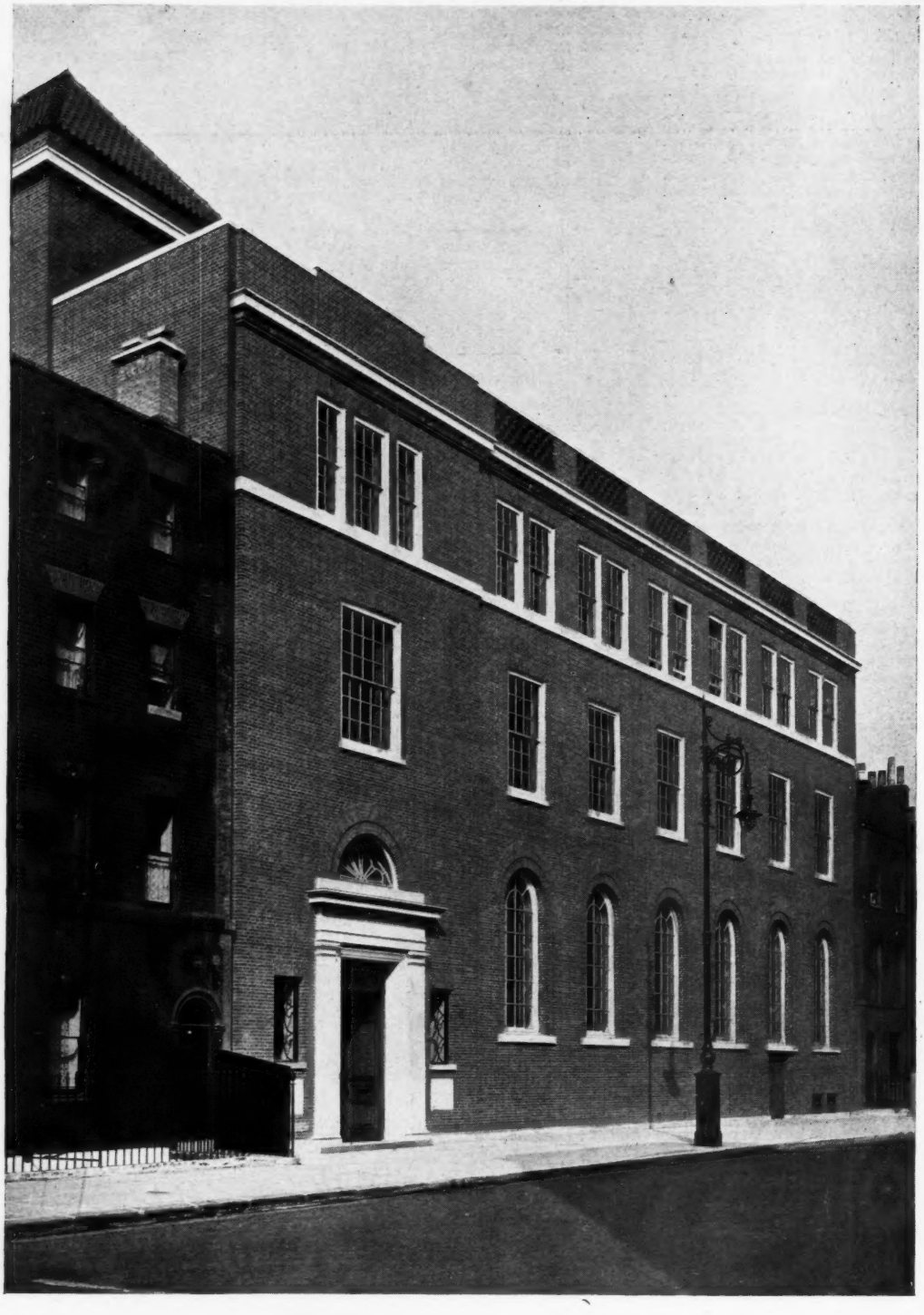
In opening a discussion on "The Need for a Technique of Economic Change," Sir Josiah Stamp explained that the subject had been suggested by the emergence into our present economic system of a stubborn and rigid element that had so far proved less amenable than anything in the past to ordinary economic laws. It seemed to be due to the coincidence of a stationary or diminishing population with the economic disturbances due to the War and to a period of rapid technical development in industry. In ordinary times in the past increase of population had acted as an important safety valve, enabling the economic forces of new purchasing power and new labour to be directed into new channels without seriously affecting old labour and old capital. But it was ridiculous to suppose that the continuous increase of populations so characteristic of the nineteenth century was necessarily a permanent feature. In the long run economics would probably be the economics of relatively stationary populations under changing supply to changing demands.

Every new demand in the spending of existing income through the coming of new attractions meant a less demand for old products. The problems of localised unemployment through special displacement would become more frequent. There was already the anomaly of heavy overtime in one trade with material unemployment in another. The motor-bus appeared in competition with the railway train; radio sets displaced pianos; and the social consequences of such changes would be far more pronounced with a stationary or declining population than with an increasing population. The required new technique of economic change was therefore quite different from the old, under which, on the whole, fresh demands on the labour of the rising generation kept economic equilibrium with the fresh consumptive power. The technique of economic change was also different under a "planned society" from what it was under individualism. The price to be paid for a "planned society" was that the consumer would never be able to get his own way and whim as under individualism. The direction of resources and their transfer from one product to another in the interests of producing capital and labour other than in the interests of the consumer would become an integral part of planning. Effort would be given to protect the old producers, both the skill of the workers and the capital of the investors, from immediate extinction. The consumer would no longer call the tune. The producers' proclivities and abilities would have to be considered. The precise extent of this interference with the consumer would determine the completeness or otherwise of the planning. In some circumstances production could not be planned without the consumer being controlled and compelled to buy less or more than he wanted of any particular commodity. Unless planning was going to apply to a very large proportion of total production, it would be an extraordinarily difficult problem, but if it was a large proportion and if people's demands were in the aggregate fairly stable, then the technique of change should not be impossible.

Were there any ways of constructing a technique of economic change under the conditions of a stationary population? If the price maximum was not to be "monkeyed" with, if the reactions of the consumer were not to be defied, only palliatives—hardly plans—could be offered. Several schemes there were, however, which should be explored before being rejected. First a more thoroughgoing scheme for aiding through the State the easier transfer of labour, adjusting as quickly, and with as little human suffering as possible, the flow of labour to the new whims of demand. Comprehensive rules about new employment, and considerable interference with trade union rules, would no doubt be necessary. Secondly, special aid could be given to the labour and capital of obsolescent industries, but on a tapering scale, so that the industries would die slowly and without undue pain to the labourers. For the capitalist involved there might be the warding-off of foreclosure, forced sale, and the scrapping of plant until the human element had petered out at a not inhuman rate. The question would arise whether new and prosperous industries should not be specifically charged with the whole or part of the cost of industries put into Queer-street.

Science at the Universities.

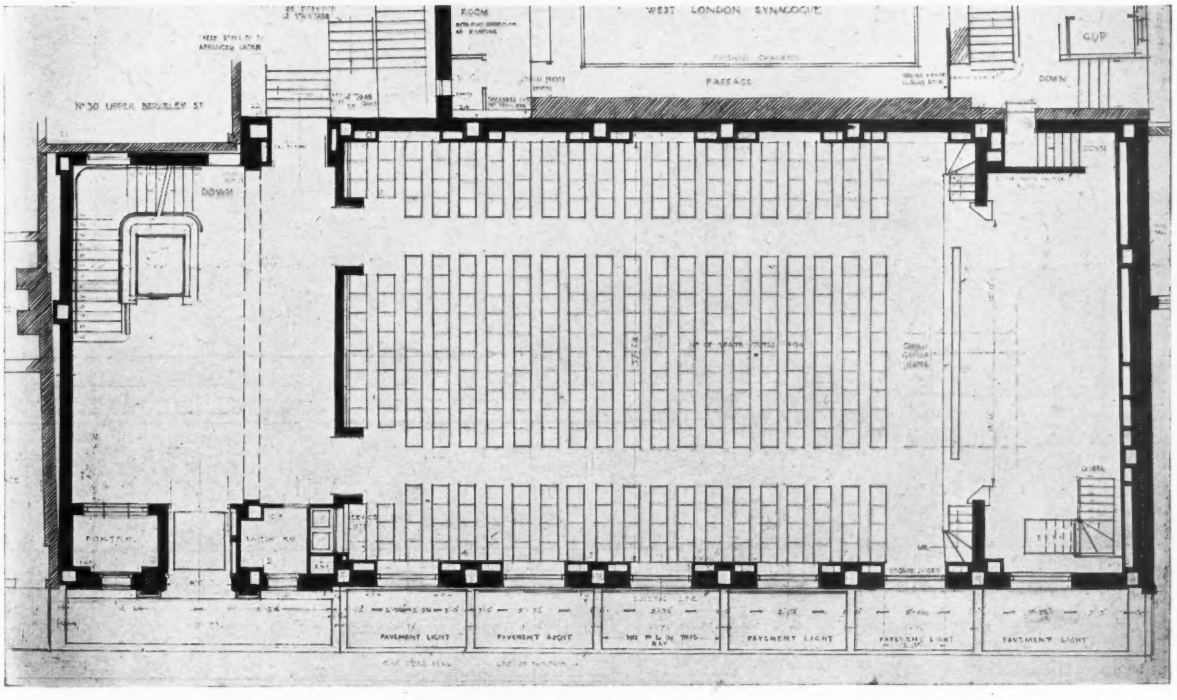
The Rector of the Imperial College of Science and Technology, Mr. Tizard, in his address from the chair to the Educational Section, discussed the place of science at the universities. The great practical achievements of science (he continued) had brought about a change of attitude on the part of the general public towards scientific education and research. The House of Commons now was not sufficiently critical of expenditure on research, because its faith was greater than its understanding. There were now about 50,000 students in the universities of Great Britain, half of whom were studying some form of natural science. The growth had been made possible only by the provision of public money, and all the universities in this country were now dependent on the taxpayer and ratepayer. On the more general question he said that, while a little competition was healthy, the multiplication of specialised departments in different universities and colleges could easily be carried too far, resulting in an unnecessary waste of money.



SYNAGOGUE HOUSE, SEYMOUR PLACE, W.

[MESSRS. MEWÈS AND DAVIS, Architects.

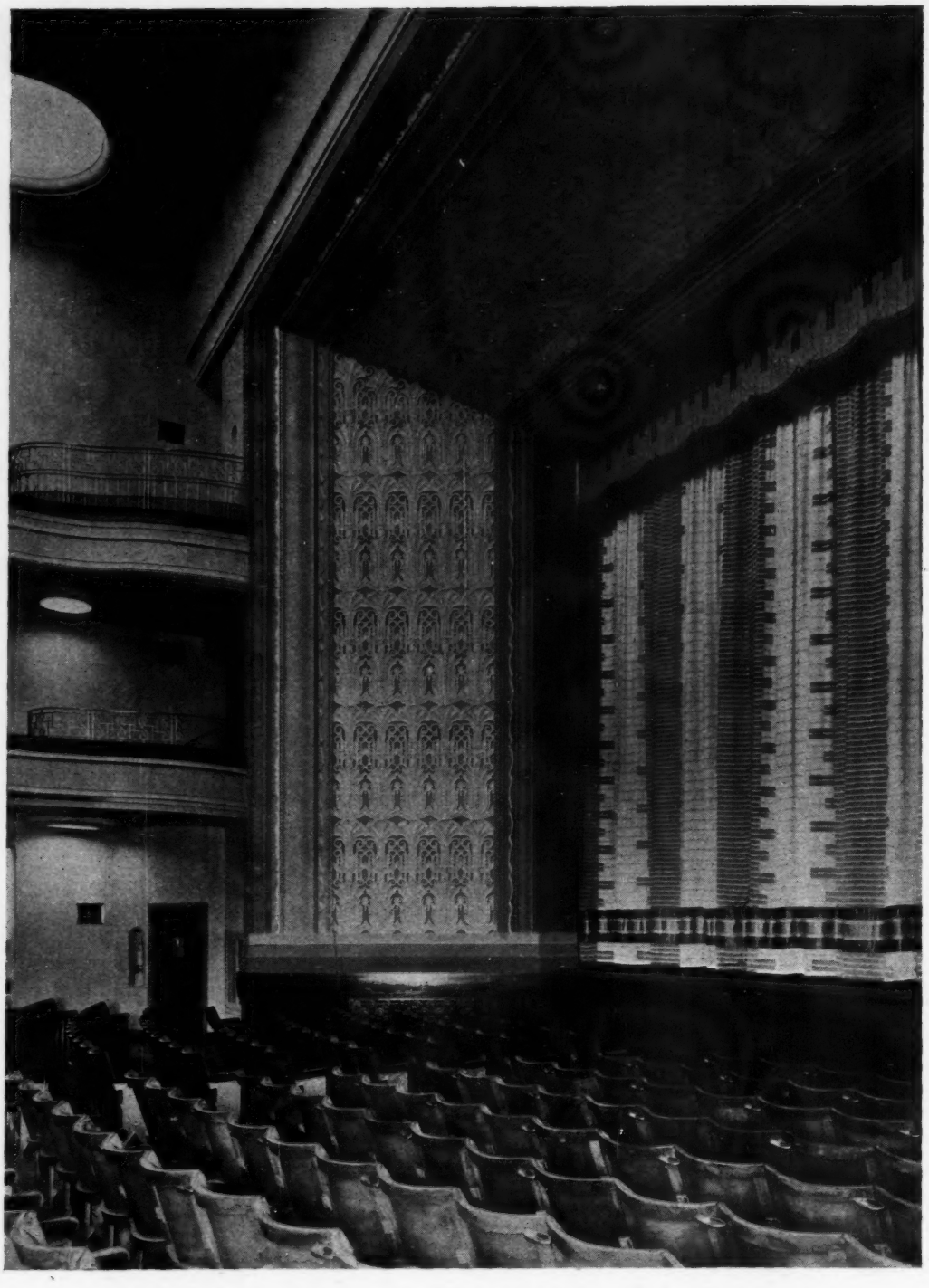
INTERIOR OF HALL.



GROUND-FLOOR PLAN.

SYNAGOGUE HOUSE, SEYMOUR PLACE, W.

MESSRS. MEWÈS AND DAVIS, Architects.

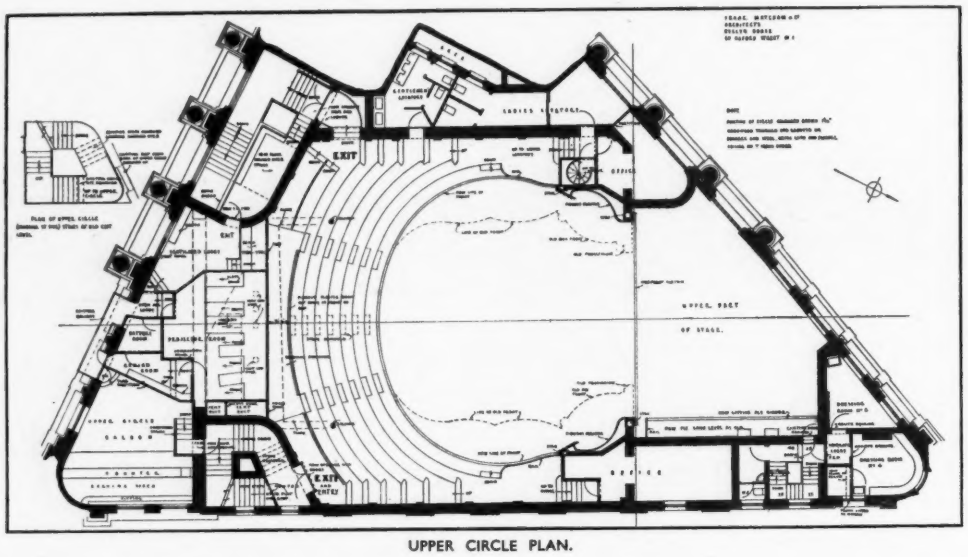


RECONSTRUCTION OF THE LONDON PAVILION, W : View across Auditorium, from Stalls.

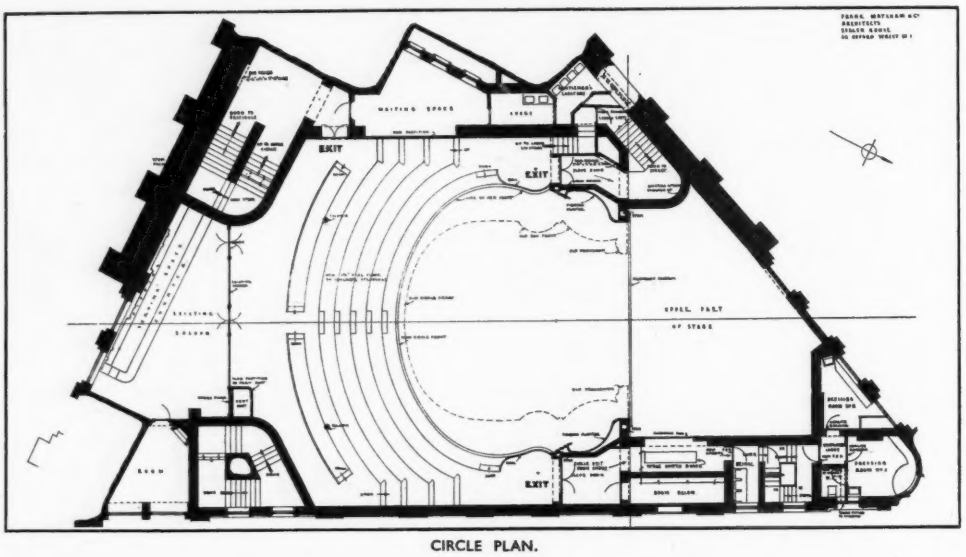
MESSRS. FRANK MATCHAM AND CO., Architects.

RECONSTRUCTION OF THE LONDON PAVILION, W : The Vestibule.

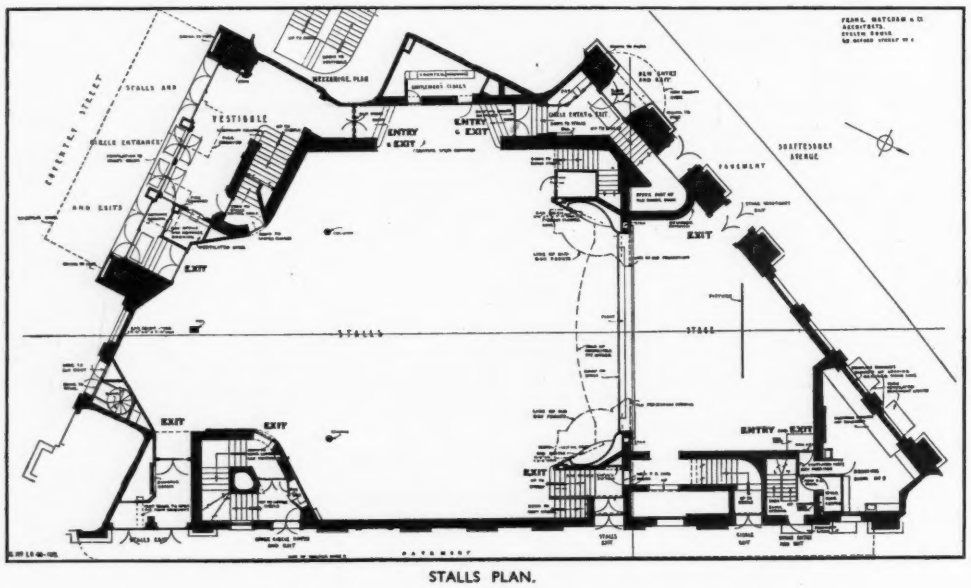
MESSRS. FRANK MATCHAM AND CO., Architects.



UPPER CIRCLE PLAN.



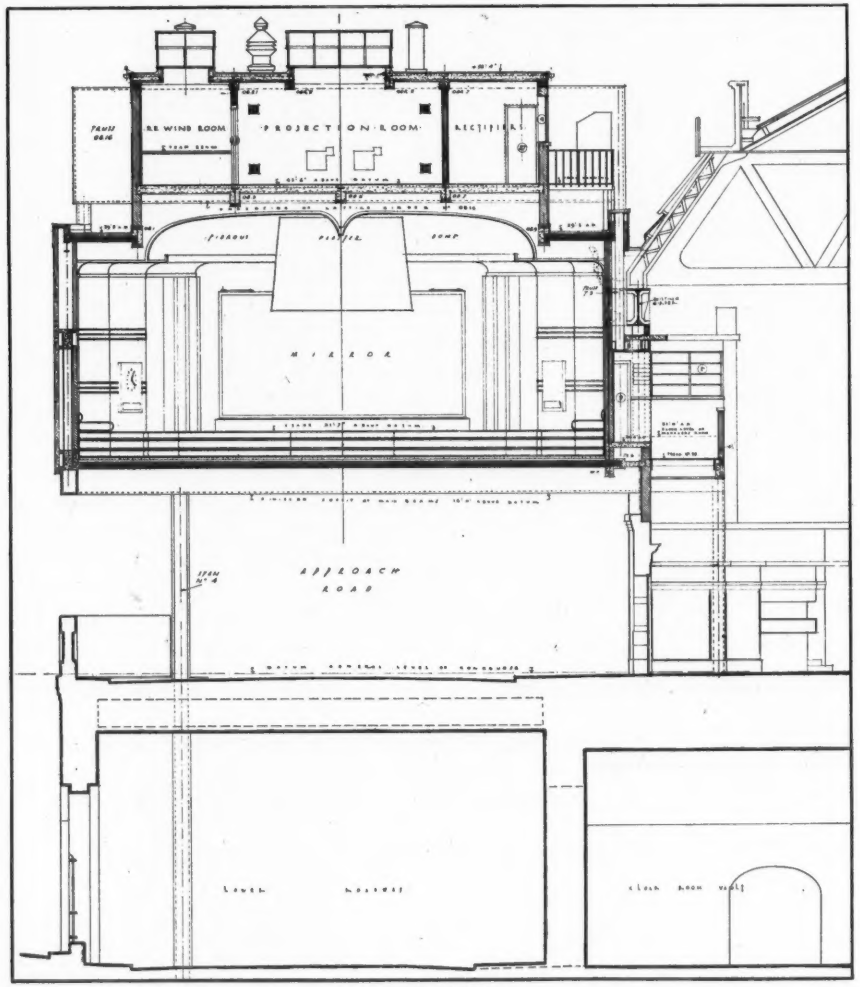
CIRCLE PLAN.



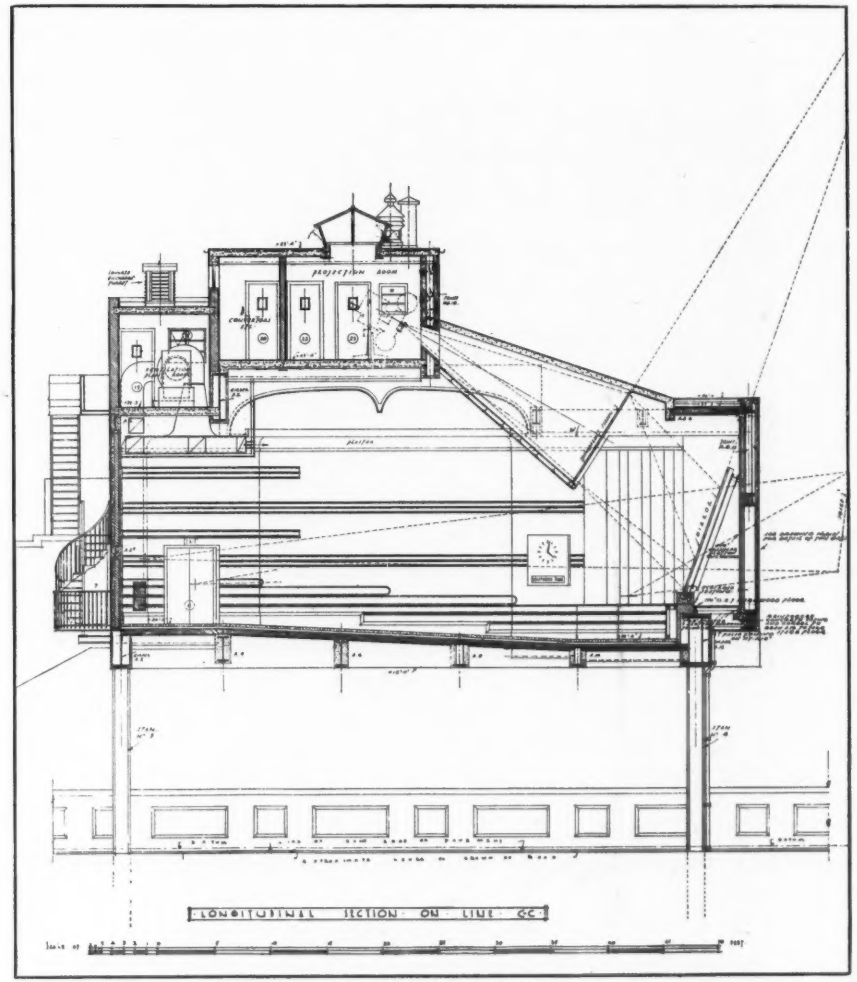
STALLS PLAN.

RECONSTRUCTION OF THE LONDON PAVILION, W.

MESSRS. FRANK MATCHAM AND CO., Architects.



CROSS SECTION.

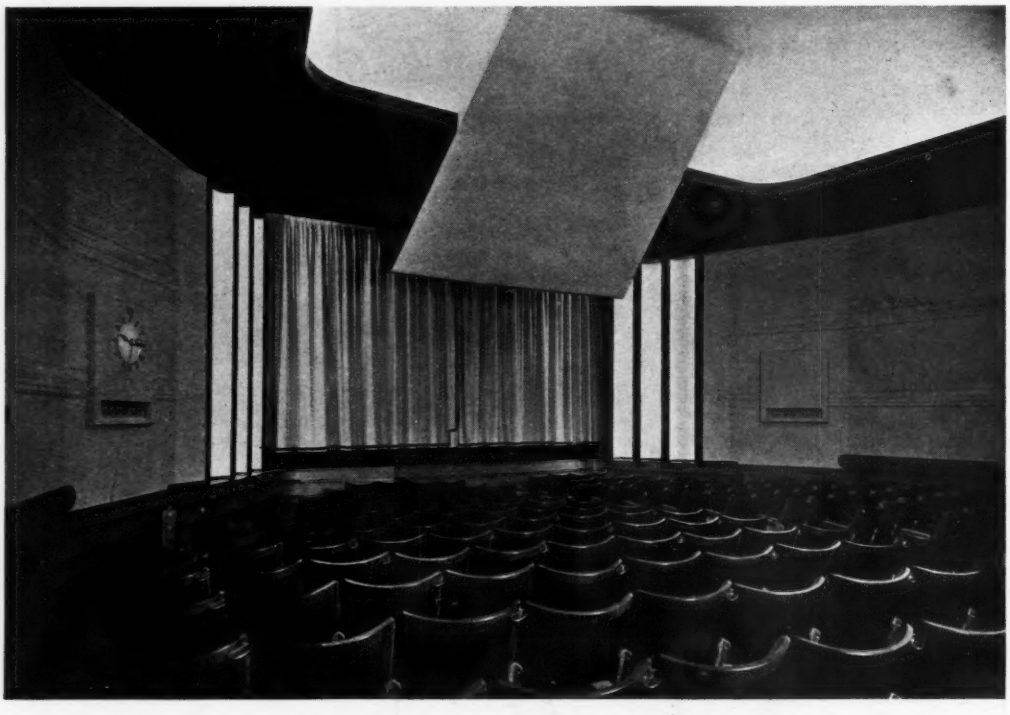


LONGITUDINAL SECTION.

NEWS THEATRE, WATERLOO STATION, S.E.

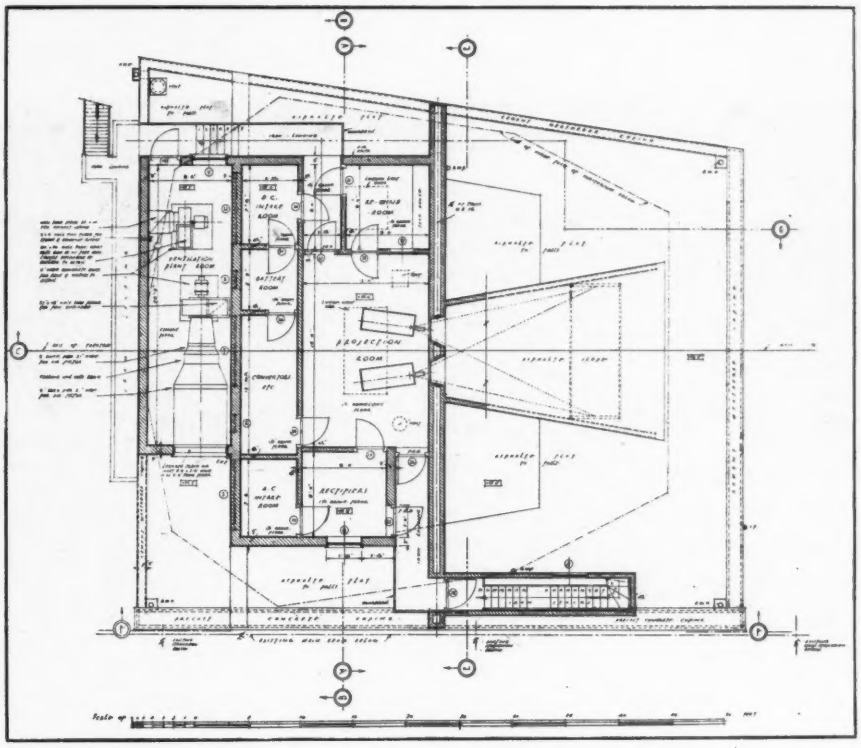
MR. ALISTER G. MAC DONALD, A.R.I.B.A., Architect.

VIEW FROM CONCOURSE.

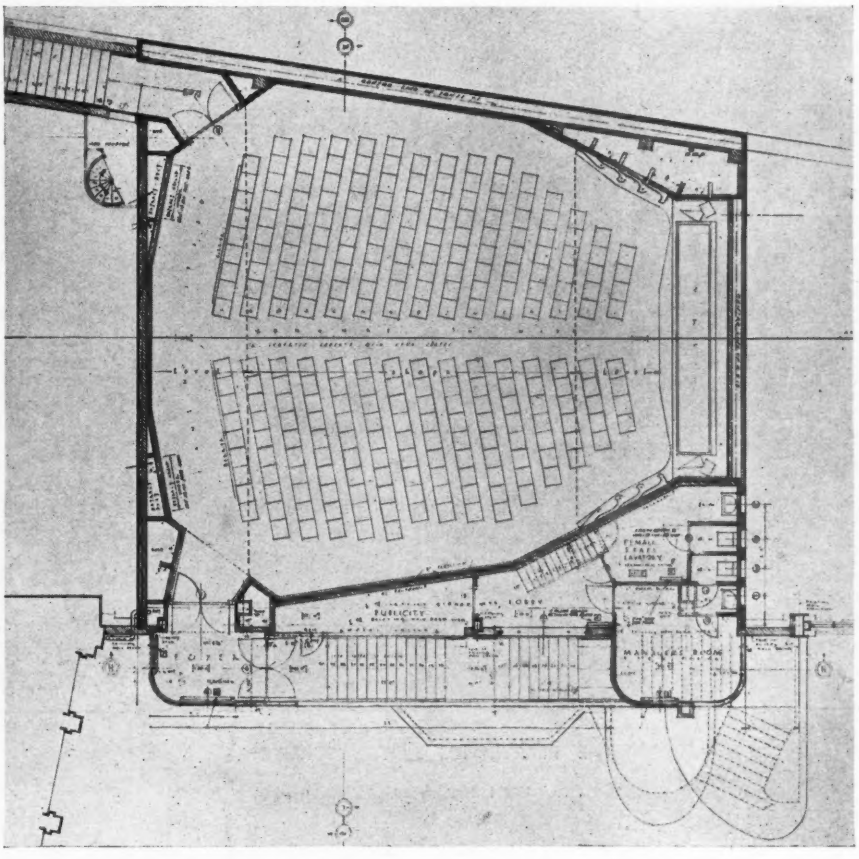


NEWS THEATRE, WATERLOO STATION, S.E.

MR. ALISTER G. MAC DONALD, A.R.I.B.A., Architect.



PLAN AT PROJECTION ROOM LEVEL.



PLAN AT AUDITORIUM LEVEL.

NEWS THEATRE, WATERLOO STATION, S.E.

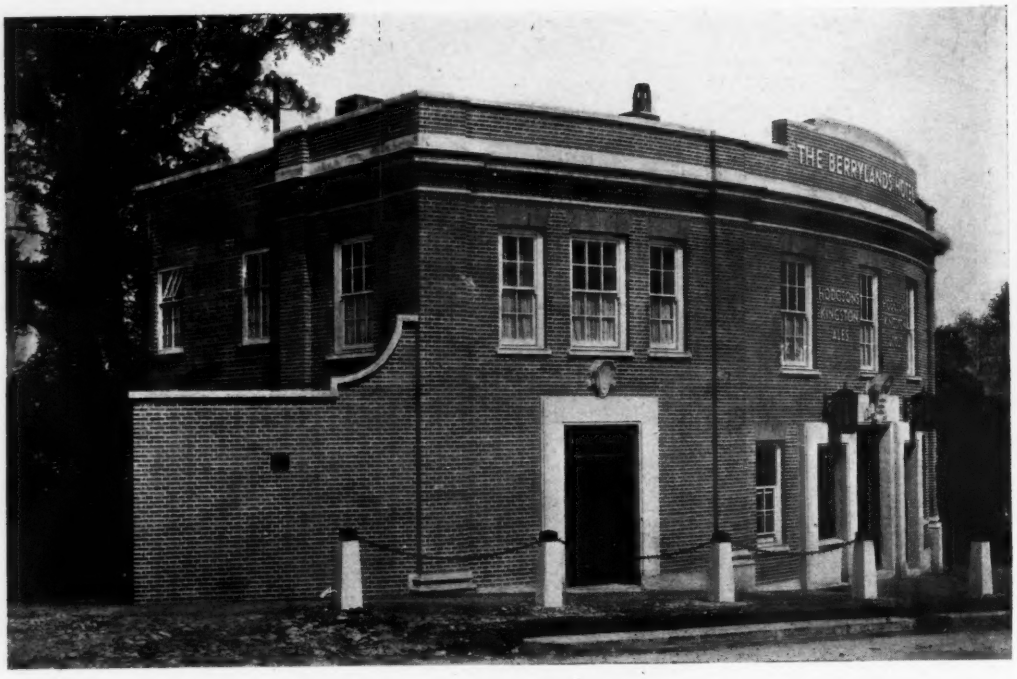
MR. ALISTER G. MAC DONALD, A.R.I.B.A., Architect.

THE BERRYLANDS HOTEL, SURBITON.

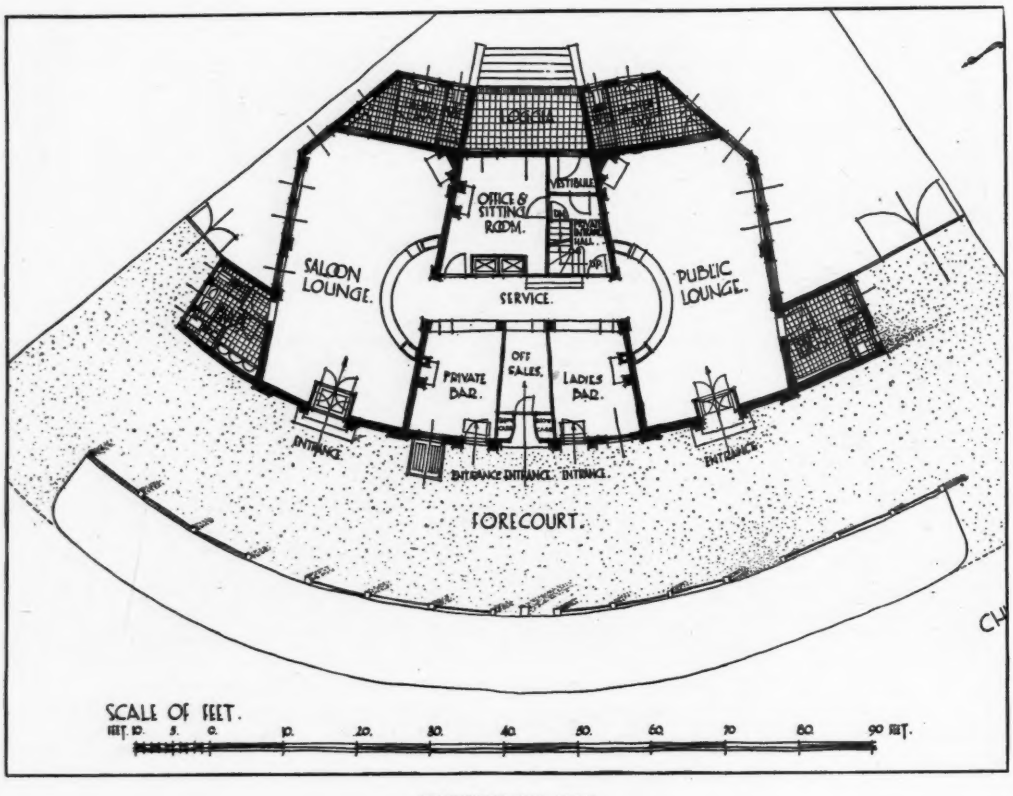
MR. JOSEPH HILL, F.R.I.B.A., Architect.

THE BERRYLANDS HOTEL, SURBITON: Saloon and Lounge.

MR. JOSEPH HILL, F.R.I.B.A., Architect.



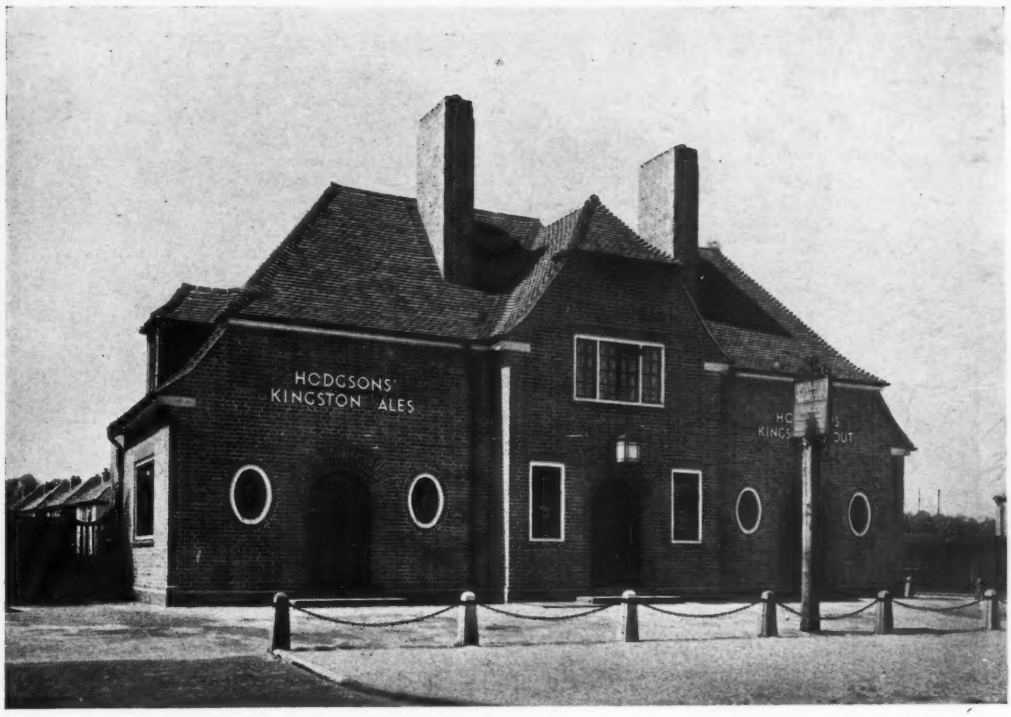
VIEW FROM SOUTH-EAST.



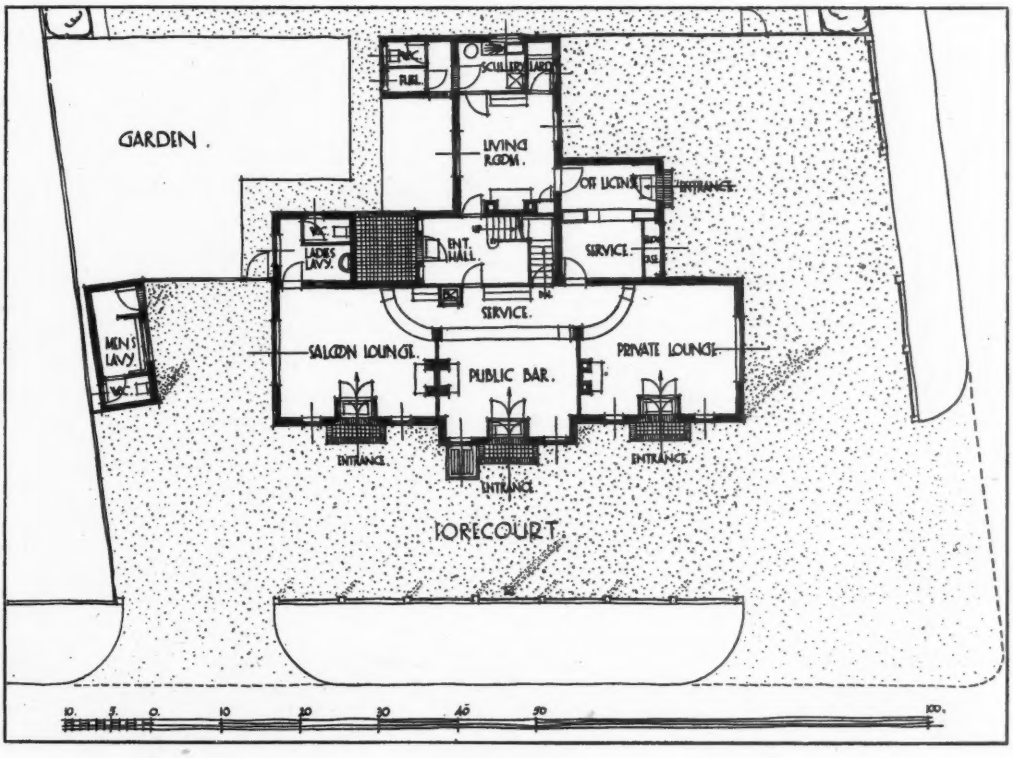
GROUND-FLOOR PLAN.

THE BERRYLANDS HOTEL, SURBITON.

MR. JOSEPH HILL, F.R.I.B.A., Architect.



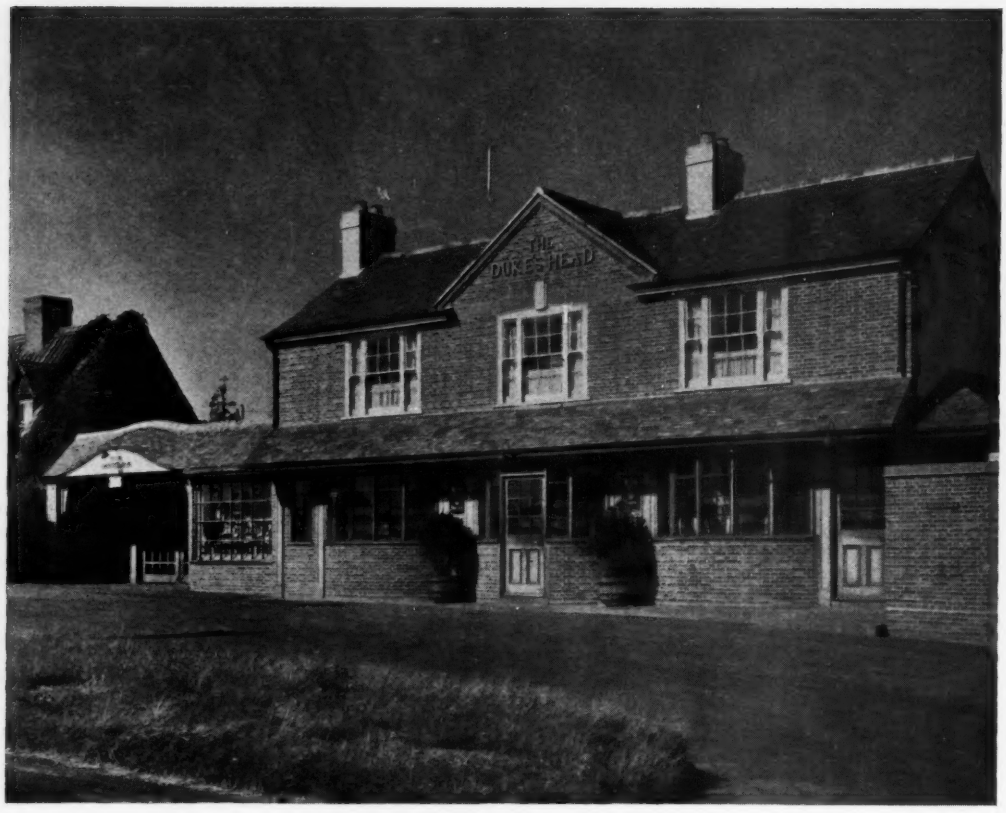
ENTRANCE FRONT.



GROUND-FLOOR PLAN.

THE "WHITE HART" PUBLIC HOUSE, FARNCOMBE, SURREY.

MR. JOSEPH HILL, F.R.I.B.A., Architect.



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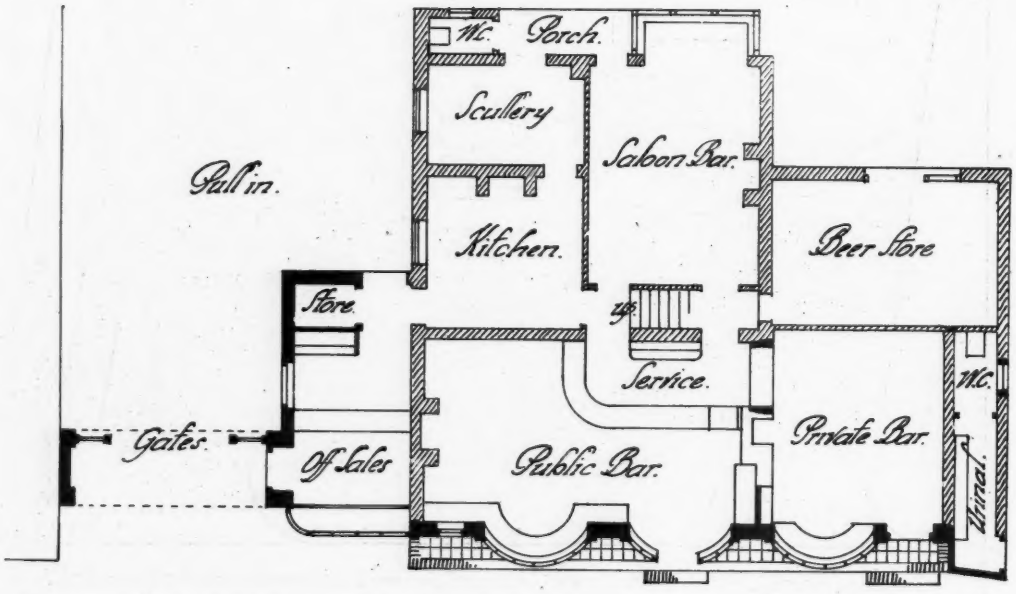


GROUND-FLOOR PLAN.

THE "DUKE'S HEAD" PUBLIC HOUSE, TADWORTH, SURREY.

MESSRS. WILLIAMS, PETTETT AND GARDNER, L. and F.R.I.B.A., Architects.

THE ORIGINAL "BONES GATE," STANDING ON ADJOINING SITE, AND SCHEDULED AS AN ANCIENT MONUMENT.

ENTRANCE FRONT.

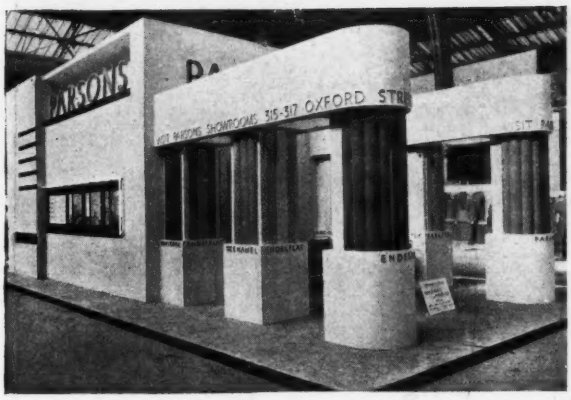
THE "BONES GATE" PUBLIC HOUSE, CHESSINGTON, SURREY.

MESSRS. WILLIAMS, PETTETT AND GARDNER, L. and F.R.I.B.A., Architects.

THE AUDIENCE.

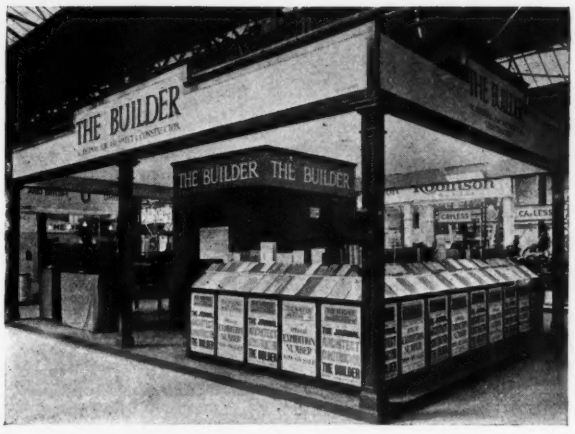
In front, reading from left to right, are :—Mr. W. E. Collier, Lord Balfour of Burleigh Sir Giles Scott, Mr. Greville Montgomery and Mr. Luke Fawcett.

THE OPENING OF THE BUILDING TRADES EXHIBITION AT OLYMPIA, ON WEDNESDAY.

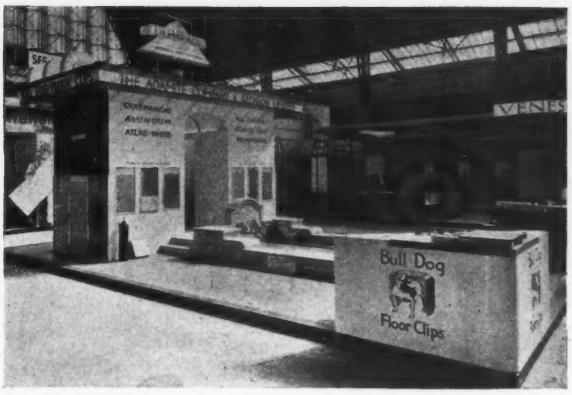


THOMAS PARSONS & SONS, LTD.

LONDON BRICK COMPANY & FORDERS, LTD.



"THE BUILDER."

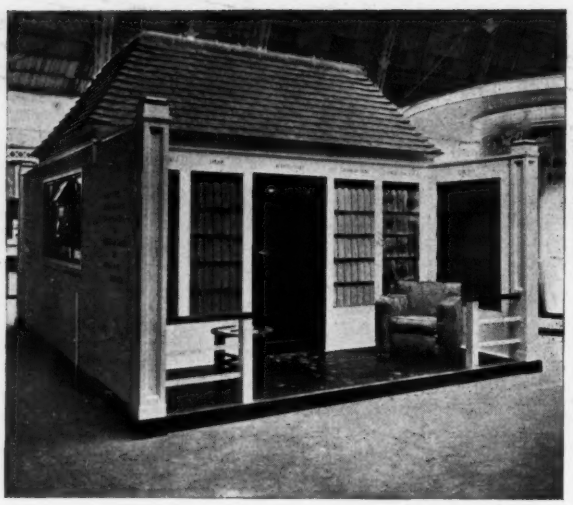


THE ADAMITE COMPANY & REDALON, LTD.

VENESTA, LTD.

STEEL SCAFFOLDING CO., LTD.

STANDS AT THE BUILDING TRADES EXHIBITION.



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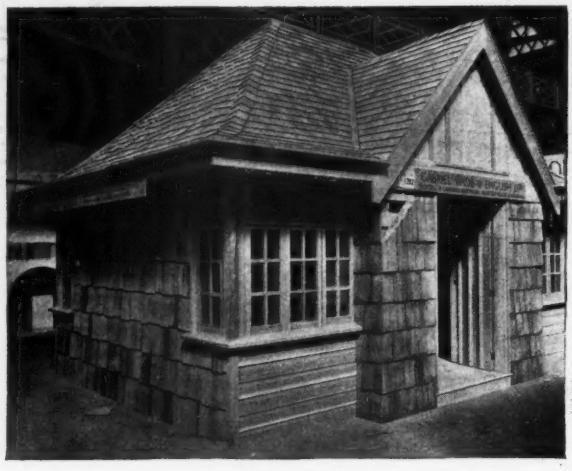

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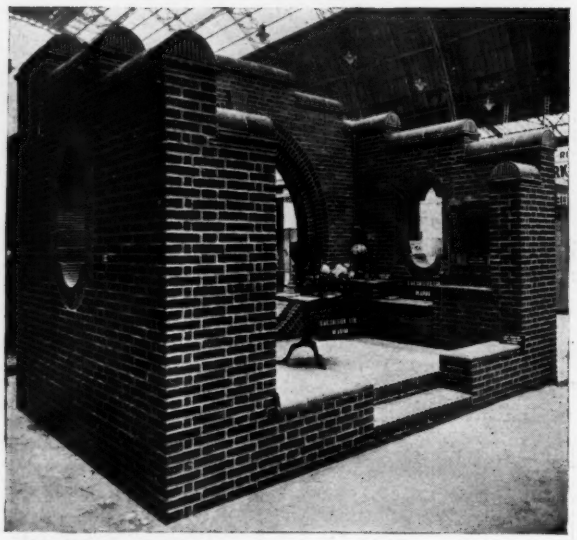
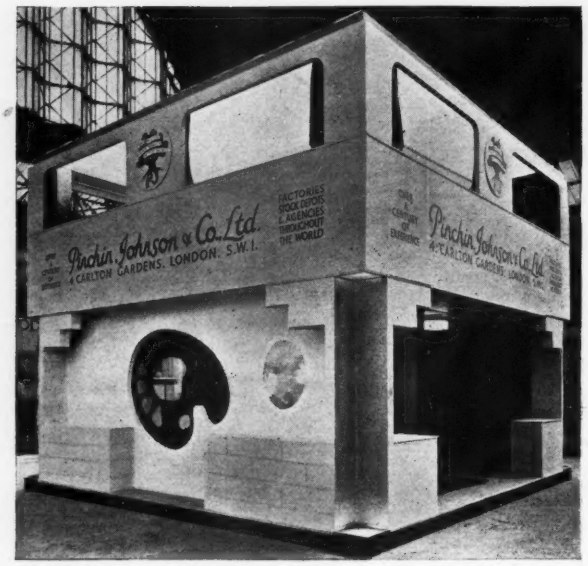
JAMES LATHAM, LTD.

PILKINGTON BROS., LTD.

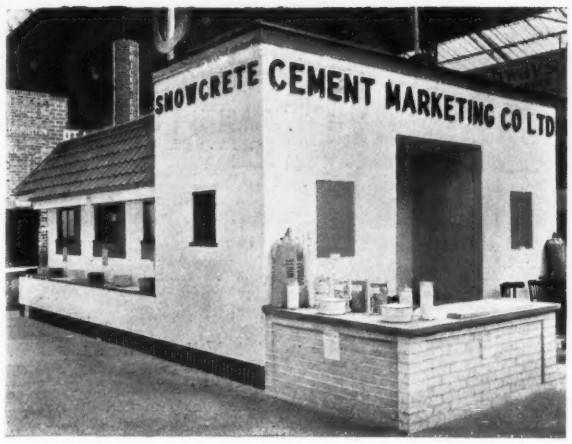


S. & E. COLLIER, LTD.

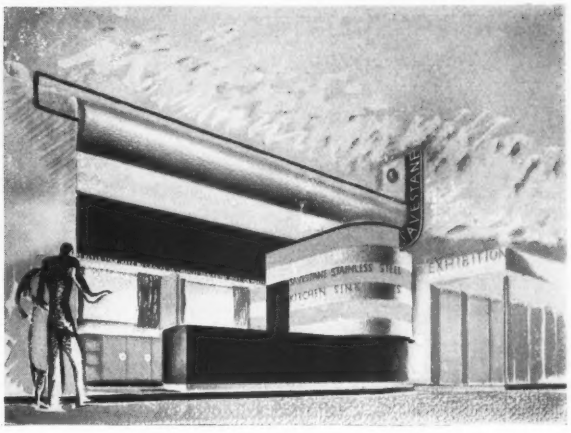

Pinchin, Johnson & Co. Ltd.
4 CARLTON GARDENS, LONDON, S.W.1.
FACTORIES STOCK DEPOTS & AGENCIES THROUGHOUT THE WORLD
Pinchin Johnson & Co. Ltd.
4 CARLTON GARDENS, LONDON, S.W.1.

PINCHIN, JOHNSON & CO., LTD.

STANDS AT THE BUILDING TRADES EXHIBITION.



CEMENT MARKETING CO., LTD.



A. JOHNSON & CO. (LONDON), LTD.

EDUCATIONAL SUPPLY ASSOCIATION, LTD.

AUSTINS OF EAST HAM.

STANDS AT THE BUILDING TRADES EXHIBITION.

ILLUSTRATIONS

PLATES.

Synagogue House, Seymour Place, W.

This building was erected for the use of the congregation of the West London Synagogue and comprises on the ground floor an entrance vestibule, with passenger lift, and a large hall for general purposes, with stage and gallery. Provision has also been made for an organ. The upper floors are planned to accommodate a council room, a room for private prayer, secretary's offices, classrooms, cloakrooms, and lavatories. In the basement are the kitchen, changing and store rooms, heating chamber, etc. The small tower is designed to take the over-run of the lift and also contains the water tanks and staircase to the flat roof, which will be used as a playground. The building is faced with 2 in. multi-coloured bricks, and the entrance doorway, main cornice and dressings are in Portland stone. The heating installation is by electricity, on the electric thermal storage system, with hot water panels in the ceilings of the various rooms. The building throughout is of fire-resisting construction; the floors are of hollow tiles and the roof is insulated with compressed cork 2 in. in thickness, on top of which asphalt is laid. As the side wall of the hall adjoins the organ chamber of the principal synagogue a cavity has been formed between the two buildings and is filled in with slabs of silicate cotton, to prevent sound being transmitted through the walls; also the doors leading from the stage to the vestry, and the lobby to the staircase adjoining are of soundproof construction.

The general contractors were Messrs. W. H. Gaze and Sons, Ltd., and the following were sub-contractors: Dorman, Long and Co., Ltd., steelwork; Caxton Floors, Ltd., fireproof floors; Art Pavements and Decorations, Ltd., Biancola work to staircase; Stevens and Adams, Ltd., wood block flooring; John Bolding and Sons, Ltd., sanitary fittings; Richard Crittall and Co., Ltd., heating, ventilation and hot-water system; Higgins and Griffiths, Ltd., electrical installation; General Electric Co., Ltd., electric light fittings; Gas Light and Coke Co., gas supply; Crittall Manufacturing Co., Ltd., metal casements and gearing; Ames and Finnis, bricks and tiles for roof; Waygood-Otis, Ltd., passenger lifts; George Johnson, Ltd., service lift; J. A. King and Co., Ltd., pavement lights and cellar flaps; Leyland and Birmingham Rubber Co., Ltd., rubber tiling; Haywards, Ltd., fire escape staircase; Fredk. Braby and Co., Ltd., wire guard panels; Simonis, Ltd., fire appliances; Comyn Ching and Co., Ltd., ironmongery; Bratt, Colbran and Co., fireplace; The Chatwood Safe Co., Ltd., strong room door; The Dorian Workshop and Studio, name plates and memorial tablets; Morris-Singer Co., metal balustrading; Luxfer, Ltd., fire-proof "Copperlight" glazing; Cope and Co., Ltd., floor tiling in lavatories; Builders' Merchants (London), Ltd., wall tiling in lavatories.

Messrs. Mewès and Davis are the architects.

The London Pavilion.

The present front of the London Pavilion dates from 1885. The interior, which was rebuilt in 1900, remained unchanged until this year, and has now been completely reconstructed. The boxes and side promenades have been removed, and the two circles reconstructed on modern lines, giving more seating accommodation. The proscenium has been widened from 23 ft. to 35 ft., during which operation the whole of the roof and stage wall had to be supported. Immediately over the proscenium has been formed an organ chamber capable of holding an organ of the largest type. The treatment of the auditorium has been carried out on simple lines, devoid of mouldings. The centre of the new ceiling is occupied by a large double-tiered dome, flanked on either side by long elliptical-shaped domes, within which is concealed in troughs the lighting of the interior of the building. The stalls area has been enlarged and the rake of the floor has been increased.

The auditorium is decorated very simply, the walls being in beige, with various features picked out in green and walnut, to harmonise with the seats and carpet, which are in green and brown. Extensive alterations have been carried out to the main entrance in Piccadilly, where a spacious vestibule has been formed. This, with its pay and advance pay boxes and approaches to waiting rooms, has been treated in a rich manner, the cornices and pilasters being in silver leaf, and the walls of green and silver texture, with a marble floor and skirting, the whole illuminated from the hidden troughs in the cornices. The main exterior alteration is at this entrance. The piers have been removed and a range of glazed walnut doors have been inserted, surrounded by marble pilasters and framing, in which are decorated chromium and green poster frames and ventilation grilles. Surmounting the entrance is a new canopy, 50 ft. long by 12 ft. deep, of a modern type treated in green and silver cellulose, brilliantly illuminated. A new entry has been formed in Shaftesbury-avenue, with a canopy on similar lines.

Messrs F. G. Minter, Ltd., were the main contractors, and the following firms were associated with the work: Smith Walker, all steelwork; Maple and Co., Ltd., fibrous plaster; Kingsmill Metal Co., metal work and canopies; Frank Burkitt, Ltd., fire-proof curtain; Concrete, Ltd., concrete steppings; Art Pavements, Ltd., all marble work; F. Knight and Co., radiator grilles, poster frames, etc.; Campbell Bros., interior decoration and exterior painting; Geo. Wright, Ltd., spiral staircases, etc.; Davis, Bennett and Co., Ltd., sanitary fitting; F. G. Minter (Decorations), Ltd., decoration to main vestibule; Ragusa, asphalt; Clarke and Vigilant and Co., Ltd., sprinkler; Scaffolding (Great Britain), Ltd., scaffolding; Berkeley Electrical Engineering Co., Ltd., electric lighting; Jeffries and Co., heating and ventilating.

The "Tubelight" architectural lighting in the entrance vestibule, lobbies, staircases, and in the chandelier fittings in the stalls and balcony bars was designed by Associated Architectural Industries.

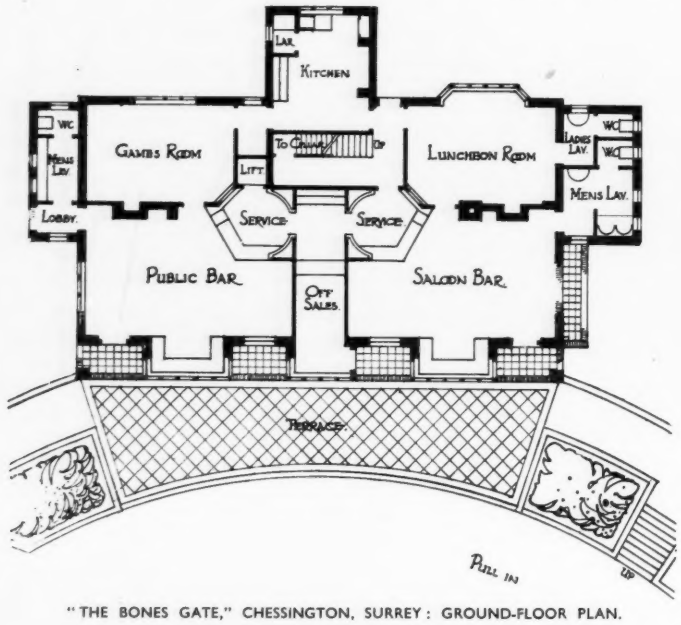
Messrs. Frank Matcham and Co. are the architects.

News Theatre, Waterloo Station.

A year or two ago a News Theatre was erected under the roof of Victoria Station, from the designs of Mr. Alister G. MacDonald, A.R.I.B.A., and a similar theatre has just been completed at Waterloo Station. The seating capacity is 250. The most interesting feature of the building, apart from the structural steelwork, which is carried down to the level of the lower roadway, is the system of stereoscopic mirror projection, here used for the first time in this country. The invention of Dr. R. T. A. Innes, formerly Astronomer Royal to the Dominion of South Africa, it consists (as will be seen from a section reproduced) of a tunnel in the ceiling, through which the rays are projected on to a transparent screen at its mouth, from which they are then reflected by a large sloping mirror occupying the position of the usual screen. Distortion is thus avoided, and the device enables members of the audience sitting within a few feet of the "mirror-screen" to view the pictures without discomfort. A small subsidiary screen is provided as an indicator board giving warning of the departure and arrival of trains. The exterior walls are of 4 in. reinforced concrete. Permanent shuttering on the inside is of synthetic boarding, and there is an inner wall of 4½ in. cellular brickwork. The floor is of pre-cast concrete beams. For insulation, "Thatchboard" 2 in. thick has been laid on floor beams, covered with 2½ in. of cement concrete, over which a cork carpet is laid. There are air-spaces filled with asbestos in the side walls. The finish of the internal walls is plaster, distempered, and there are vertical fibrous plaster lighting fins at the proscenium end.

The general contractors were Messrs. F. G. Minter, Ltd., and the following firms were associated with the work:—Young, Austen and Young, heating and ventilation; Somerville-Barnard Construction Co., Ltd., steelwork; Claude-General Neon Lights, Neon signs; Troughton and Young, Ltd., electrical installation; General Electric Co., electrical fittings; F. G. Minter (Decorations), Ltd., decorations; F. Knight and Co., Ltd., ironmongery and metalwork; Newalls Acoustic Products, Ltd., soundproofing; Clark and Fenn, Ltd., plasterwork; Frank Burkitt, Ltd., fire-proof shutters, etc.; F. A. Norris and Co., metal windows and staircases; Comyn, Ching and Co. (London), Ltd., copper handrail and balustrade; Granitese (Great Britain), Ltd., seamless cement glazing; the General Asphalte Co., Ltd., asphalt; Cement Marketing Co., Portland cement; Plastona, Ltd., external waterproofing; Everseal Products, Ltd., internal waterproofing; Hy-Rib Sales, "Hy-Rib"; F. G. Minter (Decorations), Ltd., floor coverings;

(*Continued on page* 459.)



"THE BONES GATE," CHESSINGTON, SURREY: GROUND-FLOOR PLAN.
MESSRS. WILLIAMS, PETTETT AND GARDNER, L. & F.R.I.B.A., Architects.

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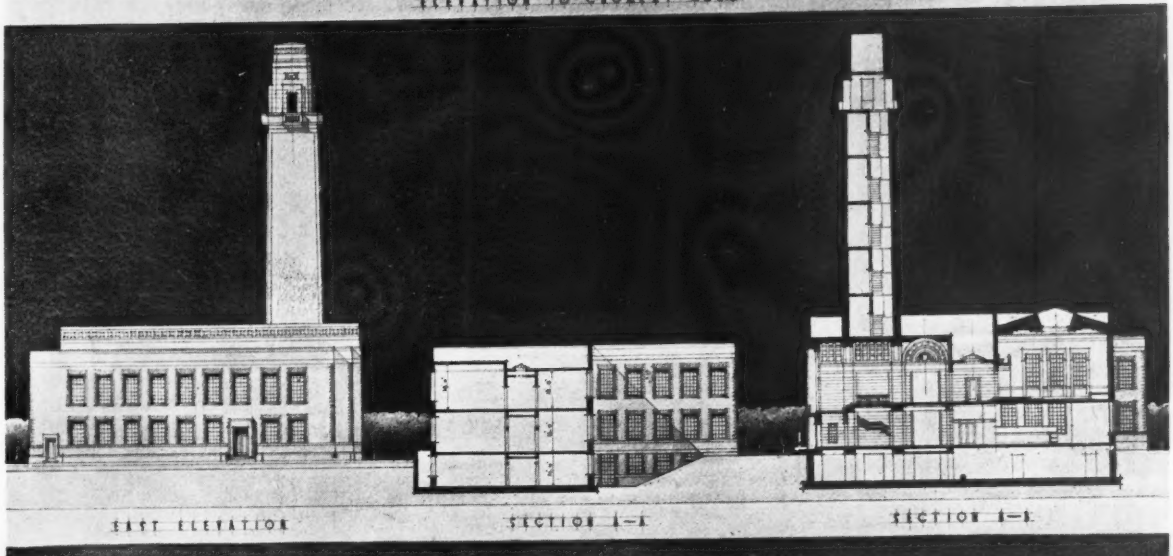
14 Sept 1934

SWINTON AND PENDLEBURY MUNICIPAL BUILDINGS COMPETITION.

FIRST PREMIATED DESIGN.

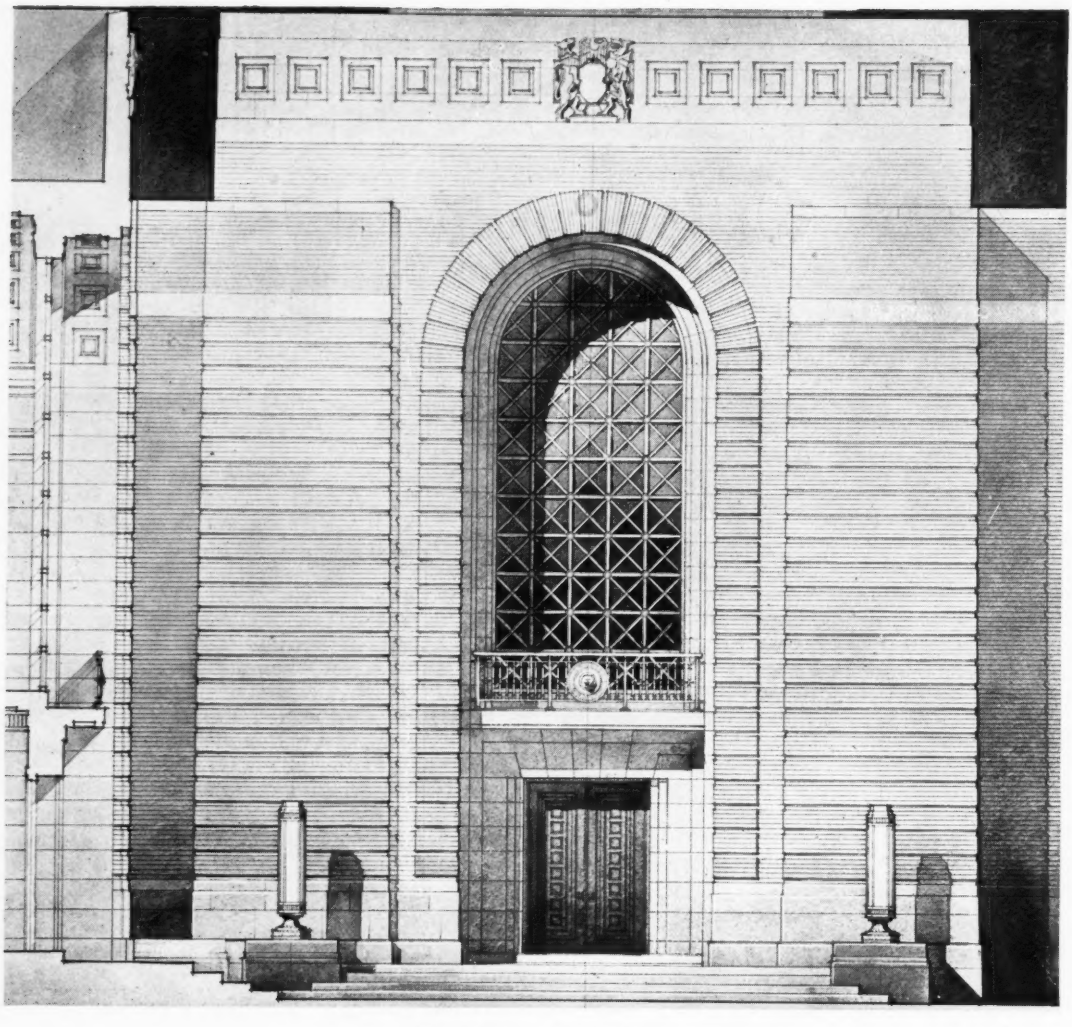
ELEVATION TO CHORLEY ROAD



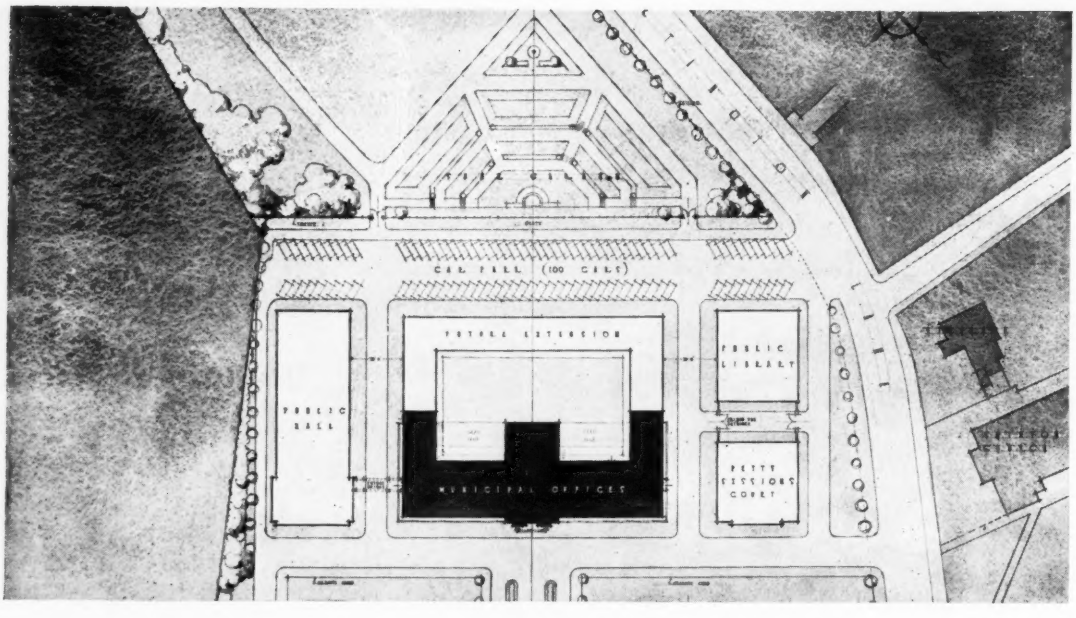
EAST ELEVATION SECTION A—A SECTION B—B

SOUTH ELEVATION

MESSRS. PERCY E. THOMAS, F.R.I.B.A., AND ERNEST PRESTWICH, M.A., F.R.I.B.A., Associated Architects.



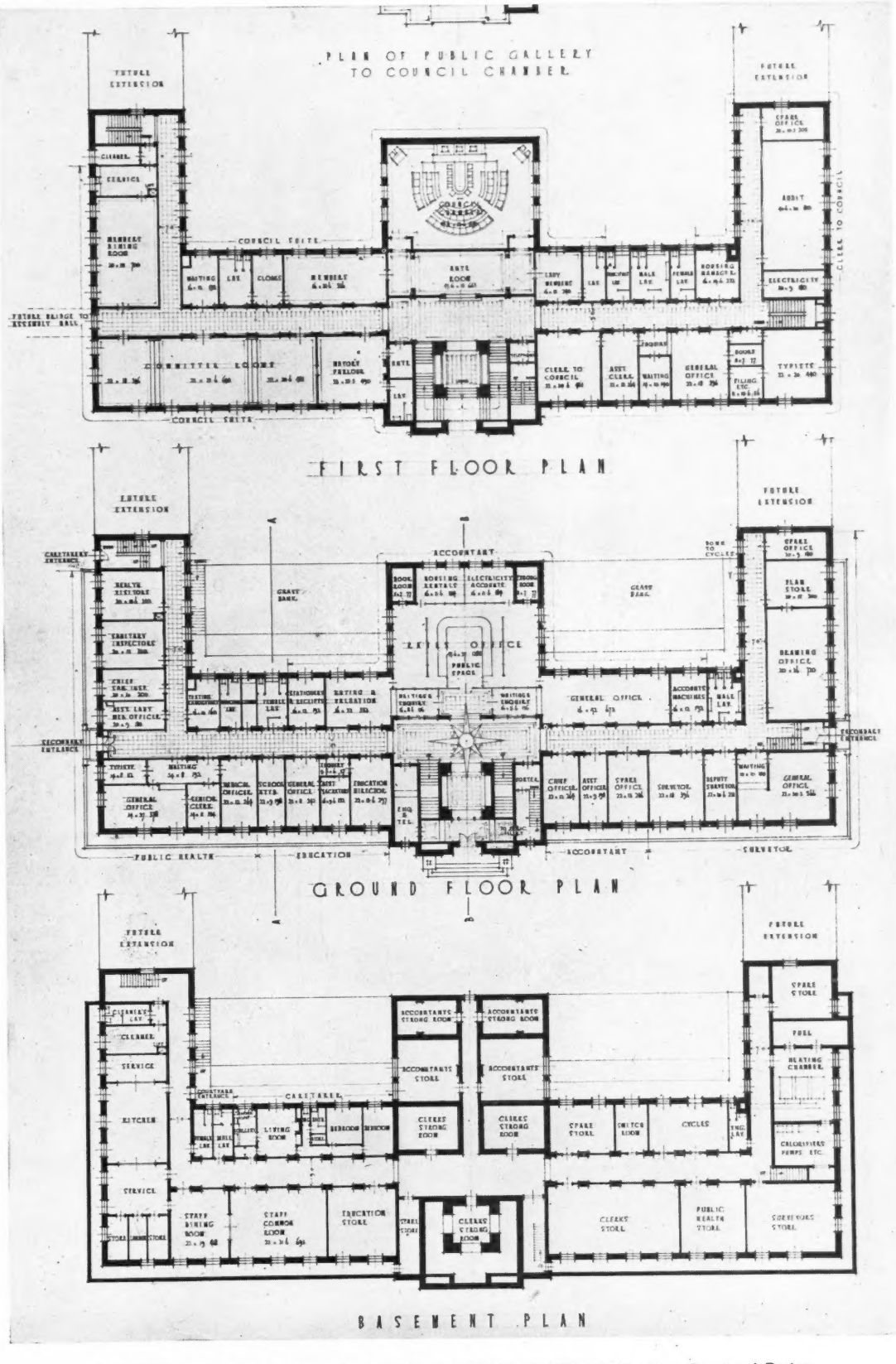
DETAIL OF MAIN ENTRANCE.



BLOCK PLAN.

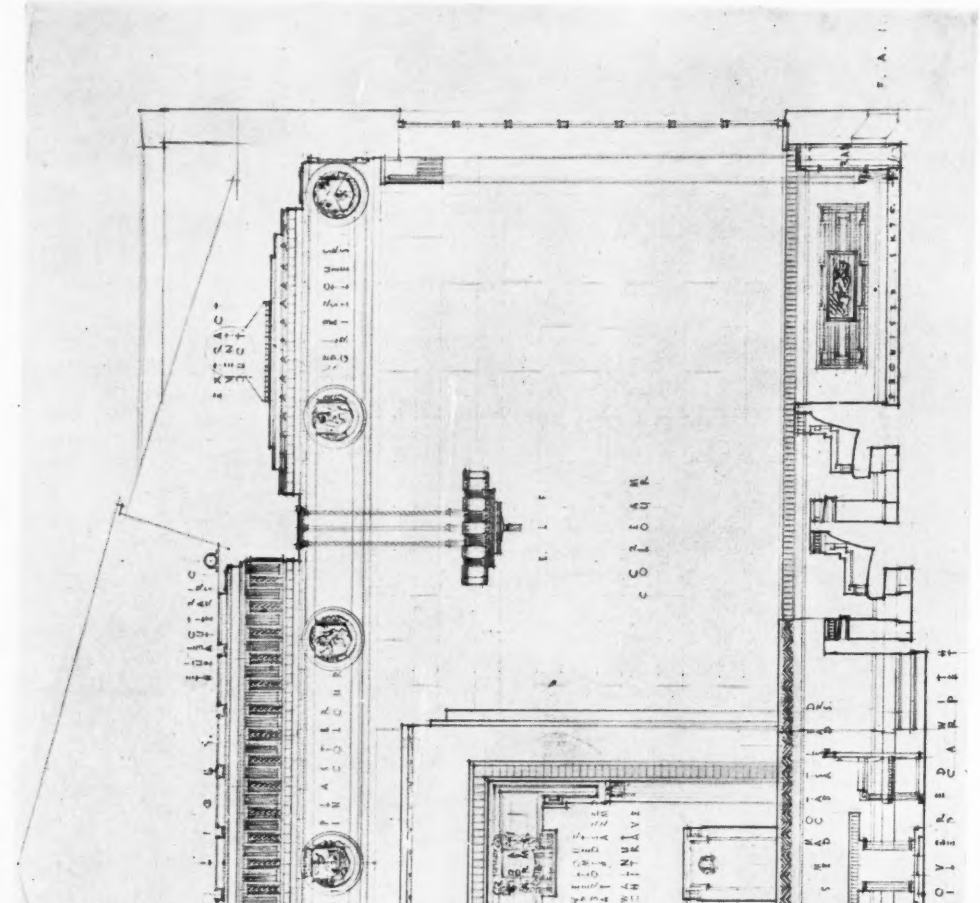
SWINTON AND PENDLEBURY MUNICIPAL BUILDINGS COMPETITION: First Premiated Design.

MESSRS. PERCY E. THOMAS, F.R.I.B.A., AND ERNEST PRESTWICH, M.A., F.R.I.B.A., Associated Architects.



SWINTON AND PENDLEBURY MUNICIPAL BUILDINGS COMPETITION: First Premiated Design.

MESSRS. PERCY E. THOMAS, F.R.I.B.A., AND ERNEST PRESTWICH, M.A., F.R.I.B.A., Associated Architects.



DETAIL OF COUNCIL CHAMBER.

SWINTON AND PENDLEBURY MUNICIPAL BUILDINGS COMPETITION: First Premiated Design.

MESSRS. PERCY E. THOMAS, F.R.I.B.A., AND ERNEST PRESTWICH, M.A., F.R.I.B.A., Associated Architects.

THE BUILDING TRADES EXHIBITION

OPENING CEREMONY

THE Building Exhibition was opened on Wednesday afternoon at Olympia by Lord Balfour of Burleigh.

The chair was taken by Sir Giles Gilbert Scott, R.A., P.R.I.B.A. (chairman of the exhibition), and the guests and officials present included :—George Hicks, M.P.; Sir Edgar Bonham Carter; Mr. F. W. Stratton; Mr. A. B. H. Colls; Dr. R. E. Stradling; Mr. H. Greville Montgomery (director, Building Exhibition); Sir Henry Tanner; Major G. B. J. Athoe; Messrs. Louis Ambler, T. Lawrence Dales, H. V. Milnes-Emerson, J. E. Dixon-Spain, W. H. Forsdike, Hugh C. Montgomery, T. Barron, G. W. Buchanan, M. S. Briggs, Alan Chorlton, M.P., R. Coppock, J. A. Gotch, Arthur Keen, G. A. Lansdown, W. T. Plume, Maurice Webb, J. G. West, E. Berry Webber, G. Grey Wornum, T. S. Tait, H. V. Lanchester, W. J. Rudderham, D. Barclay Niven, T. P. Bennett, H. St. J. Harrison, F. R. Yerbury, Francis Lorne, and C. Kavanagh.

The Chairman said he wished first to express the pleasure it gave him to occupy the chair, and, on behalf of the building industry generally, he wished to express appreciation of the energy, skill and success with which the vast undertaking had been organised by Mr. Greville Montgomery. A building exhibition under cover must be chiefly an exhibition of building materials. Therefore, it was of primary interest to those who were employed in the industry. But there was a great deal of interest also for the general public, especially as the general public were far more interested in building than they had been in pre-war days. Vast housing schemes had given the masses a direct personal interest in building, and had made them what might be called "building-minded." As an architect interested in planning and designing, he would first look at the exhibition in a general way to see if the general impression was satisfying. Then he would want to see if the main lay-out was a good working plan, making for an easy and continuous flow of people moving from one exhibit to another, and ultimately arriving at the exit without confusion or muddle. He would then look at the individual design of the stands themselves, and lastly at the exhibits. All the things he had mentioned except the exhibits should be contributed by the architects to the exhibition, but he wondered if these had contributed more than a few individual stands. He called upon Lord Balfour of Burleigh formally to open the exhibition.

The Technique of Building.

Lord Balfour of Burleigh said it was a very great privilege to declare the exhibition open. It was the successor of exhibitions which had been held since the year 1895. If there was one thing more remarkable than another, it was the advance in technique in everything connected with building since that time. He had not yet seen this exhibition, but he remembered the last one, when he had gone away bewildered by contemplation of the variety offered. The man who was going to build to-day had at his disposal a most fascinating variety of technique in every branch, whether it were materials, lighting, heating, decoration or the smaller details of cupboards, food storage, and so on. It seemed that architects and builders had begun to wake up, and were performing what the economists to-day regarded as an extraordinarily useful function. The aspect of building development in which he (the speaker) was interested more than in any other was that of the housing of the poorer-paid section of the community. We were now promised by the Government a new Housing Bill this autumn, and he was sure that everybody in the meeting was awaiting the Bill with interest, or even anxiety. The Government were fully alive to the urgency of the housing problem, and were doing their utmost to arrive at a solution of it. Some were inclined to advocate the setting up of what the National Housing Committee had called a Housing Commission. This was not the time to go over the ground in detail, but there were two aspects of these proposals of which he would like to remind the audience, and which he thought would commend themselves to the building trade and the architectural profession. These were : (1) Long-range planning of where the houses were to be put up; and (2) Some kind of organisation of the production of the building materials which would be necessary in any large programme. It seemed to him that to leave those two aspects of the housing question to the unorganised action of different local authorities and other people who were to erect the buildings was not looking far enough ahead. Taking the question of building materials, if the manufacturers of building materials could be assured of, say, 90 per cent. capacity output over a long period of years, they would be able to reduce costs. It was not beyond the wit of man to arrive at some kind of long-term organisation if only they could be assured of sufficient continuity of plant. He was happy to say that although the Government had declined to set up a Housing Commission, there was good evidence that they intended to give effect to the majority of the proposals that the National Housing Committee had put forward. Another matter to which he would like to refer was the provision of low-rented houses. It was sometimes said that the provision of houses at sufficiently low rents was not a thing which private enterprise could satisfactorily accomplish, and he would like to make clear what it was that he, personally, meant when he said that houses for the working-classes, before they could be lived in for sixty, eighty or a hundred years, must, first, be produced and, secondly, they must be owned during that long period of occupation. When he said that private enterprise could not provide houses at sufficiently low rents for the lower-paid working classes, what he meant was that private enterprise could not own those houses during sixty, eighty or a hundred years, because such ownership did not provide a suitable return on the capital invested. He wanted to see private enterprise build those houses, but not as a speculation. That was because, if built as a speculation, the rents would not get down to under 10s. a week, inclusive of rates, which was all that should be asked from the man earning £2 a week or less. It seemed to him that if he were a municipality building houses, he would infinitely prefer to have those houses built by private enterprise under contract rather than have them built by direct labour. This was the proper sphere for private enterprise, but if we were to rely on the speculative builder to provide houses at under 10s. a week—inclusive not only of instalments spread over twenty years but of repairs, management, insurance and incidental expenses—we were asking him to do a thing he never could do. All were looking with great interest towards the Government's Bill. It was felt that the provision of houses for the poorer-paid working classes was a task the National Government ought to perform. If the Government could succeed in solving the housing problem it would do what no previous Government had done before and would earn from the country a gratitude which would be expressed at the polls at the next election. He had great pleasure in formally declaring the exhibition open.

Forthcoming Housing Legislation.

Mr. W. E. Collier, J.P. (President of the National Federation of Building Trade Employers), moved that a cordial vote of thanks be given to Lord Balfour of Burleigh. In doing so he said that all desired to congratulate his lordship and the National Housing Committee on the invaluable report that had been issued by that committee. In that report the committee investigated the whole position and had laid down the national requirements of the present time. The Committee had also faced difficulties and made recommendations. They could not all agree with those recommendations, and it was evident that the report would not be accepted fully, but Lord Balfour of Burleigh should not be discouraged on that account. The fact that the report had been prepared and issued, and was available to all who were interested in the subject, was in itself a valuable achievement, and if the views expressed in it were not entirely accepted, they would nevertheless have weight with Government departments when preparing legislation for the autumn. We all looked forward to that legislation with a great deal of expectancy and some apprehension, hoping that the national need of houses for the lower-paid workers would at last be filled. As to what Lord Balfour of Burleigh had said about long-range planning, all engaged in the building industry—whether as manufacturers, merchants, employers or operatives—would be glad to know what the plan was and over what period it was expected to be spread. He (Mr. Collier) had been glad to see in the report the reference to private enterprise. As his lordship had said, there were serious difficulties, especially in the provision of finance cheaply. Cheap finance was essential if houses were to be built and let at ten shillings a week, as was essential if all sections of the community were to be well housed. To-day the building industry was better organised than ever for the contemplation of problems of this kind and for giving whole-hearted assistance in carrying out a national policy. All sections of the industry were organised and brought together in the Building Industries' National Council. The exhibition did a valuable work by giving the opportunity for meeting every two years, and by lying before architects and the general public the improvements and changes so rapidly taking place in building materials and building construction.

Need for Organised Planning.

Mr. Luke Fawcett (President, Amalgamated Union of Building Trade Workers) seconded the resolution for a vote of thanks. He claimed that he represented the most important class of those engaged in the industry, and this notwithstanding the progress of mechanisation. The workers made no attempt to retard this mechanisation, but claimed some share in the improvements brought about by organised science and invention. The building industry performed one of the most important of social services : it was desirable to make it function more in the direction of the solution of the housing problem. All sections of the industry, and especially the operatives, would welcome an organised planning. If we could only think ahead, the resources of the industry could be used to the greater advantage of all concerned. It was no advantage to the operative to have long periods of unemployment alternating with shorter periods of keen industry and overtime.

The vote of thanks was accorded by acclamation.

On the proposal of Mr. W. Craven-Ellis, M.P., a cordial vote of thanks was accorded to the Chairman.

EXHIBITION ARRANGEMENTS

PROGRAMME OF FUNCTIONS.

Friday, September 14.

Institution of Structural Engineers. Visit. Judging of Students' work.

Official Luncheon to President and Council.

Saturday, September 15.

Sheffield and District Clerks of Works and Building Foremen's Association. Visit.

Incorporated British Institute of Certified Carpenters. Visit.

Lancashire Guild of Bricklayers. Meeting.

Monday, September 17.

Society of Estate Clerks of Works. Visit.

Tuesday, September 18.

Cast Concrete Products Association. Meeting.

Institution of Sanitary Engineers. Visit.

English Joinery Manufacturers' Association. Meeting.

Wednesday, September 19.

National Federation of Clay Industries. Meeting.

London Master Builders' Association. Visit.

Thursday, September 20.

Ceramic Society. Meeting.

Institution of Municipal and County Engineers. Visit.

Southern Counties' Federation of Building Trade Employers. Visit.

Lecture on "The Use of Timber in the Building Industry To-day," by Mr. E. H. B. Boulton, M.C., M.A., Manager, Timber Development Association, at 2.30.

"Under Forty Club" (Public Utility Housing). Meeting.

Friday, September 21.

Chartered Surveyors' Institution. Visit.

Land Agents' Society. Visit.

Garden Cities Association. Meeting.

Architects' Ball.

Saturday, September 22.

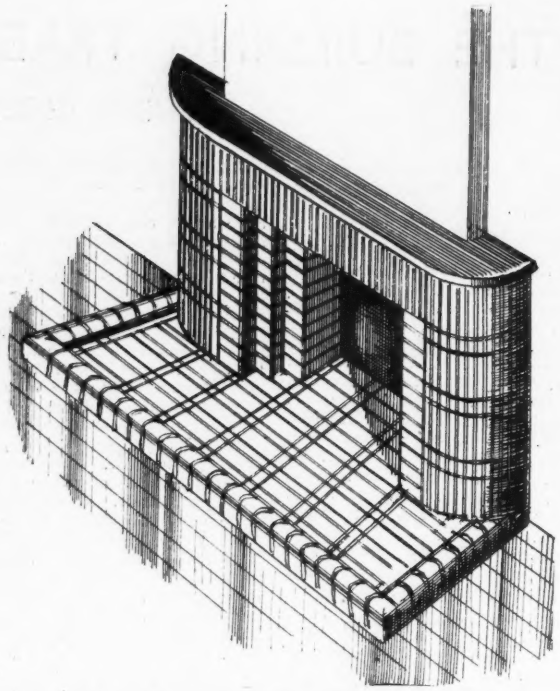
Association of Architects, Surveyors and Technical Assistants. Visit.

Incorporated Clerks of Works Association of Great Britain. Visit.

Lecture in Minor Hall, at 6 p.m., entitled "How a Building Goes Up," by Mr. G. W. Harris, followed by a film entitled "Euston House." Mr. W. H. Hamlyn, A.R.I.B.A., Chairman.

Monday, September 24.

South-Eastern Federation of the Brick Trade. Meeting.



AN "IFFLEY" BRICK FIREPLACE ON STAND K191. (See page 453.)

Ballast, Sand and Allied Trades Association. Meeting.

POPULAR LECTURES.

The following programme of free popular lectures, each starting at 6 p.m. and lasting an hour, is to be given in the Minor Hall (entered from the Gallery) at the Building Exhibition at Olympia :—

Thursday, September 13 : "London, Past and Present." By Mr. E. R. Jarrett, A.R.I.B.A. Illustrated with lantern slides.

Saturday, September 15 : "The English Village, Past and Future." By Mr. G. H. Jack, F.R.I.B.A. Illustrated with lantern slides.

Tuesday, September 18 : "The Home of To-morrow." By Mr. F. E. Towndrow, A.R.I.B.A. Illustrated with lantern slides.

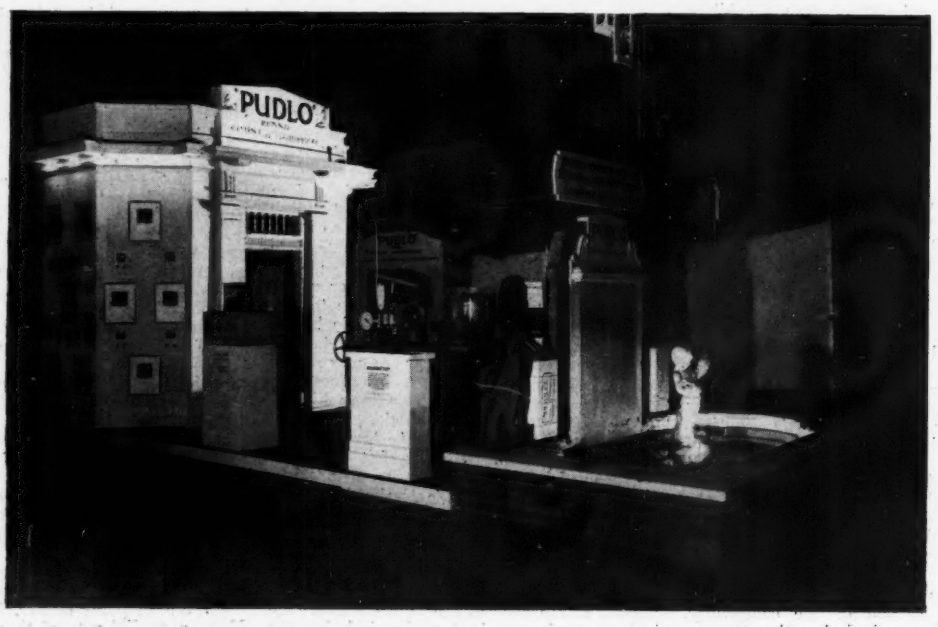
Thursday, September 20 : "Modern Gardens." By Mr. G. A. Jellicoe, A.R.I.B.A., A.I.L.A. Illustrated with lantern slides.

Saturday, September 22 : "How a Building goes up." By Mr. G. W. Harris, Ex-President of the Incorporated Clerks of Works Association of Great Britain. Illustrated by cinematograph film.

Tuesday, September 25 : "The City of the Future." By R. A. Duncan, A.R.I.B.A. Illustrated with lantern slides.

The Incorporated Association.

The Incorporated Association of Architects and Surveyors, as in previous years, have a large reception hall and rest room in the gallery of the main hall for the use of members. The President and Council extend a cordial invitation to members and friends of the architectural and allied professions to use the reception hall.



THE STAND OF MESSRS. KERNER GREENWOOD & CO., LTD. (See page 454.)

A CASUAL TOUR OF OLYMPIA

By "MEAGERON"

THE Building Exhibition at Olympia is vast, and, on the first view, slightly overwhelming. To try to absorb much of it at a time is an uncomfortable effort, and it is easier to wander about casually and see what turns up.

"Venesta" show illuminated photographs of their recent work. Among these photographs one depicts a pleasing although nearly empty room in which the walls are panelled

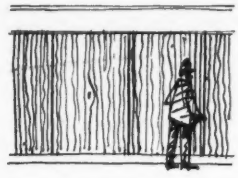


Fig. 1.

flat all round with plywood (Fig. 1). This, of itself, is not remarkable, but the plywood looks as if it might have been laid on, not in panels, but from a continuous roll. The grain of the plywood is straight and regular, but it stands on end from skirting to frieze all round the room. Of course, the plywood is not continuous, but is composed of butted panels, 7 ft. by 3 ft. by ¼ in. thick, which are planted on to a groundwork. No attempt is made to hide the joints—in fact, they are frankly chamfered—but they run with the grain and are not immediately seen. This is using plywood logically and up to its full capacity, and it looks most satisfying.

"Venesta" also show "Standard Dressing Cubicles" (for use in swimming-baths), which they deliver complete, ready for simple erection, which are collapsible, and which may be dismantled when not in use. This firm also exploits plywood for flooring, which may be laid in squares, 3 ft. by 1½ ft., on counter flooring, and neatly fixed by means of special headless nails.

The manufacturers of steel windows seem to possess untiring initiative. "Hopes" are showing their new steel cavity sub-frame window which, as well as fulfilling the normal function of a window, also conveniently fills up the openings in a cavity wall (Fig. 2). This window is, of course, comparatively expensive, but it saves much fiddling labour otherwise expended in covering or filling cavities. It has often been thought that the use of wood frames with steel frames is illogical, and this window, which shows a generous 2-in. width of metal on the outside face, is designed to eliminate the wood frame. "Architects are crazy on horizontal bars," I was informed. "But these bars are not logical, because they hold up the weather. The vertical bar is the right thing. Rain comes downward!"

"Hopes" show an old Gothic window with a rounded and cusped head, which has been borrowed from the Houses of Parliament. One finds with surprise that it is a metal sash window with weights and chains, and the bottom half made to slide upward. But the window differs from the ordinary wooden sash window in that the bottom lies flat on the same surface with the top when shut (Fig. 3).

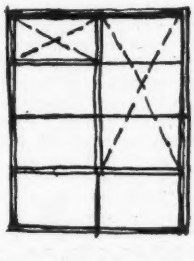


Fig. 4.

Crittalls show a special window for flats high up above ground. This is intended to stop people from falling out of windows, or, at least, to lessen any disagreeable sensation they may feel at a height (Fig. 4). Its small left-hand casement is intended for night ventilation. Also on the Crittall stand there are standard "quadrant" windows for curved corners. Four of these joined together make a complete circle. Then there are standard "fly-screen" windows for larders, and a new apparatus for manipulating upper windows. This last is a Bowden cable, which can be curved, snake-like, over and around awkward projections. Flexible controls inside houses is an attractive idea.

On an impressive stand the London Brick Co. makes a brave display of its hollow "rustic" bricks. Externally these bricks look similar to the old solid "rustic" bricks, with the combed surfaces which are well known, but the new bricks are scooped away inside and weigh 25 per cent. less than the solid bricks. In addition, the hollow bricks are claimed to be better sound and heat insulators. (Fig. 5.)

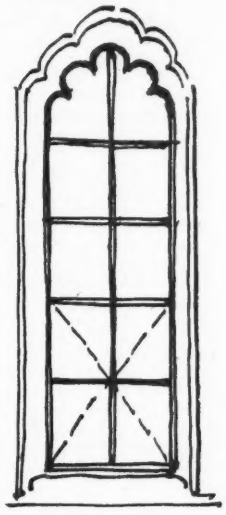


Fig. 3.

The "flexible wall board" display by "Ensoflex" shows how a comparatively thin fibrous material may be stretched from a roll on to a large surface instead of plastering. It is claimed that a builder may plant the "Ensoflex" in one piece around the four walls of a room and then cut his way out through the window and door openings. His preparation needs to be ¼-inch cement screeds placed at critical edges, to which he glues the "Ensoflex." Then he wets the material, which stretches taut like paper on a drawing-board. The material is barely ⅛-inch thick, but the piece is 10 feet wide and 100 feet long. Ensoflex would appear to have many uses.

There are two steel houses in the Exhibition, but neither is meant as a pattern for reproduction elsewhere. By means of one of these houses the Steel Scaffolding Co., Ltd., displays the excellence of its wares, and the other house, which looks like a kind of mushroom, is the exhibit of the British Steelwork Association, designed by Sir John Burnet, Tait and Lorne. One ascends a staircase in the stem of this mushroom and, looking down, sees all the other stands laid around like a rich pattern. In the top of the mushroom there are pieces of all-steel furniture.

One stand announcing "Storm-Proof Joinery," attracts much attention, but the meaning of the interesting label is not quite clear. The engaging "Mr. Therm" disports himself in paint on the stand of the Gas Light and Coke Co., and draws attention to pleasing little water heaters of chromium plate and white enamel for kitchen sinks and to other fittings. The stand itself, by its sleekness and suggestion of efficiency, seems to invite all of us to become more gas-minded and to reject our old ideas associated with gas, namely, those of dingy, groaning wall brackets and broken gas mantles.

Pilkington Bros., Ltd., the makers of "Vita" glass, make an attractive display with various coloured glasses and show the application of some original ideas. A special

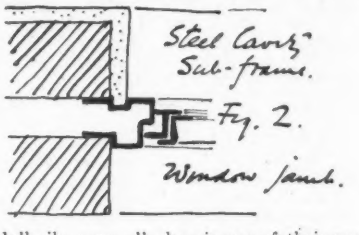


Fig. 2.

"dull silver grey" glass is one of their new products.

Architects especially must not miss the "New Homes for Old" exhibit, which is situated in the gallery and organised by the Housing Centre. It can be located by identifying a pair of old trousers hanging on a clothes line, and includes the reproduction of a slum, which seems delightfully dirty after all the new paint downstairs. But this exhibit is not a joke. It is a demonstration which makes a convincing case in favour of better ideals for re-housing, and vividly shows the menace of the slum. It also seeks to show that "ideals" do not cost money.

Again of special interest to architects is a section which has not appeared before and which should please them. This is the R.I.B.A. Club, which consists of a lounge for resting, an office with typists in attendance, a telephone for general use, and a refreshment bar. The club is provided for the architects and they are invited to use it.

(To be continued.)

Architects' Dance at Olympia.

The arrangements for the architects' dance at Olympia are now completed, and applications for tickets should be made early, as accommodation is limited. The dance is being given by Mr. Greville Montgomery, the director of the Building Trades Exhibition, in aid of the Architects' Employment Scheme, and will be held on Friday, September 21. A sit-down supper will be served at 8.30 p.m., and dancing will continue till 1 a.m. Tickets are £1 each, 15s. if bought in numbers of three—*i.e.*, three tickets cost £2 5s., four £3 5s., six £4 10s., etc. Tables may be reserved for parties of six or more if the order is received before Wednesday, September 19, but not afterwards. The entrance to the dance is in Hammersmith-road. Moon's garage, at the corner of Holland-road, is the nearest garage, but there is also an open A.A. parking place in North End-road. Tickets may be obtained from Mrs. Lanchester, chairman, Social Committee, R.I.B.A., 9, Conduit-street, London, W.1., or the secretary, Architects' Unemployment Committee, 9, Conduit-street, London, W.1.

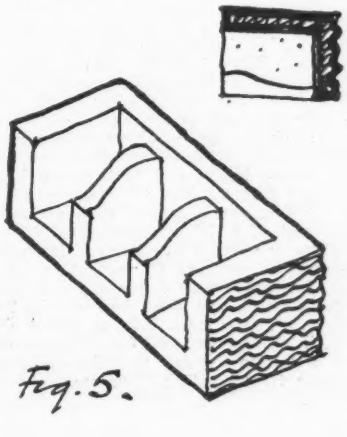


Fig. 5.

REVIEW OF EXHIBITS

[We commence in this issue a Review of those displays in the Exhibition of more particular interest to designers and constructors. Descriptions of certain educational exhibits were given in our last issue.]

Abbey Road Building Society, Wall Space 42.

On this stand the Abbey Road Building Society welcomes inquiries from all interested in a first-class mortgage service. A specially trained selected staff is in attendance to explain and solve mortgage problems. Builders developing large or small estates are specially catered for by the Society, and free typical surveys can be arranged on the spot.

The Adamite Co., Ltd., G.146.

"Colemanoid" waterproofer and floor hardener, "Alundum" non-slip floor products, "Atlas White" non-staining Portland cement and "Bricanion" lathing, the four materials marketed by The Adamite Company, Ltd., are shown on this stand in a practical display. The main feature of the stand is a miniature swimming pool ten feet long by five feet wide. The pool is constructed with 3-in. reinforced concrete walls and a 1-in. concrete floor, the whole being waterproofed with "Colemanoid"—a liquid integral waterproofer, containing no solids, which is poured into the gauging water and requires no mixing. The walls of the pool are finished in "Atlas White" stucco and the floors with grey-white and black "Alundum" non-slip floor tile, an ideal flooring for paddling pools and the shallow end of swimming pools. The surround of precast "Atlas White" terrazzo scum-channels and nosings, rendered non-slip —even when wet—with "Alundum" tiles, mosaics and aggregates in the nine colours in which they are supplied. "Alundum" aggregate is also incorporated in the "Atlas White" terrazzo steps leading to the office, the end walls of which consist of "Bricanion" lathing stretched on wood studding and partly rendered in "Atlas White" stucco in varying textures and colours. The colours are obtained by the use of coloured aggregates —not oxides—which are colour-permanent. "Bricanion" lathing is also employed in the construction of the curved ceiling leading through the office and in the canopy around the office. Part of the "Bricanion" is left unplastered to demonstrate the highly efficient key which is obtained, due to the combination of the mechanical bond and the suction bond from the baked clay crosses. A form of "Alundum" not exhibited before is the rubber-bonded safety tread—a tread composed of "Alundum" aggregate securely moulded into a reinforced base of vulcanised rubber. This tread offers a replacement type of unit of the same permanent safety and excellent durability associated with the "Alundum" stair and floor tile, mosaics and aggregates. The whole of the terrazzo, tile and mosaic laying was carried out by Messrs. Diespeker and Co., Ltd.

Robert Adams, D.58.

On this stand there is a comprehensive selection of the firm's "Victor" door springs and hinges, also door and window furniture and other specialities, all of which have been adopted for recent important contracts. Also shown are new patterns of the shallow "Victor" double- and single-action door springs with exclusive water- and oil-tight patent devices and silent check action, both in oil-check and pneumatic-check patterns; also their overhead oil-check and pneumatic-check door springs, and silent butt spring hinges and back spring hinges. The new patent "Victor" lavatory lock and the "Vicadam" patent combination till lock, each of which possesses novel features, are also on view. Other items of interest are the various patterns of ventilating gearing and fanlight openers, panic bolts, spring sash balances, and door furniture in brass, bronze, stainless steel, bakelite, china, glass, etc., in a large variety of modern patterns; also a section devoted to locks and latches suitable for all building purposes.

E. Hill Aldam and Co., Ltd., E.95.

Owing to their convenience and to the fact that they occupy a minimum of space, sliding and/or vanishing doors and folding screens are being increasingly adopted for a great variety of purposes, including garages for public and private use, for partitioning halls, for hotels, banks, sanatoria, hospitals, goods lifts, fire stations, aeroplane hangars, bus and railway sheds, factories, warehouses, etc. Several of these uses are demonstrated by exhibits on this stand, which include "Cornaway" sliding doors, "Slideaside" doors, large garage doors, "Silent Vitesse" doors for electric lifts, "Foldaway" doors for partitioning rooms, etc., and "Hideaway" doors, intended for interior house work.

D. Anderson and Son, Ltd., F.119.

"Red Hand" roofings are displayed on this stand. Special attention is directed also to "Rok" roofing, which has been tested and reported on by the Department of Scientific and Industrial Research, Building Research Station. It is a self-finished, bituminous, flexible roofing, requiring no coating when laid, and suitable for all kinds of industrial buildings. The other roofings to be seen here include "Stoniflex," a smooth-surfaced roofing; "Dason," a bitumen roofing of high quality; and "Flextile" roofing, which has a surface of crushed minerals firmly embedded; and "Flextile" shingles, made in strips 36 in. by 10 in., which when laid have the appearance of slates or tiles, according to the colour used, are also on exhibition. A selection of linings, dampcourses, and flat-roof coverings is also displayed.

Atkinson and Marler, D.79.

This firm specialises in building estate development from the viewpoint of builders. Particulars of frontages to concrete roads, offered with deferred terms, are available in such localities as Worcester Park, Surrey; Stoneleigh, Surrey; Ewell, Surrey; Ilford, Essex; and Gosport, Hants. A special staff is in attendance to supply full particulars to house builders.

Austins of East Ham, Ltd., O.257.

The stand of this company is designed to facilitate the display of their products, chief among these being the "Stormproof" windows. These windows, it is claimed, owing to their construction, preserve an equable temperature in any room and eliminate rattle and "jamming" almost entirely. Examples of standard joinery in a comprehensive variety of sizes and design to suit all types of architecture are also prominent in this display, as are doors, gates and mouldings. Large stocks of these products are held, and the firm undertake to give prompt deliveries.

B.E.N. Patents, Ltd., N.249.

A selection is here exhibited from the firm's complete range of spray paint equipment, which covers all requirements in the building and decorating trades. It includes the following: A "Handi-Spray" outfit, equipped with electric motor, which can be run from an ordinary lighting point. This set can be easily carried about by hand, and will spray paints, lacquers, varnishes, etc.; two "Pneu-Sprays," equipped with electric motor and petrol engine drive. These one-gun spray painting machines are mounted on rubber-tyred, castor steering wheels, and can be moved about with ease; a "Pneu-Matic 12" and a "Pneu-Matic 5" portable spray plant, both equipped with petrol engine drive. These machines are strongly built to withstand hard usage, and are mounted on heavy duty wire wheels with "Dunlop" tyres; two fixed spray painting machines, Models B2 and HA2, the first being designed for driving from line shafting and the second equipped with automatically controlled electric motor drive; three spray-paint combinations, with gravity, suction and pressure feed guns, made up of the essential units (with the exception of the air compressing equipment) necessary for high grade spray painting work.

Berry's Electric, Ltd., E.88 and 89.

The exhibit consists chiefly of electrical apparatus of a modern character, including "Magicoal" fires and radiators of the open element and reflector types with strikingly illuminated effects. The heaters are exhibited in rooms giving the correct setting. This stand is of particular interest to heating contractors and architects who wish to instal electric fires which give an effect of a coal fire.

Bolton Gate Co., D.70.

This exhibit displays a number of various collapsible gates, which include an ordinary spearhead gate, built up from ⅝-in. pickets, complete with ⅝-in. by ¼-in. lattice bars, spearheads, top and bottom folding tracks, the whole of the material being chromium plated; another to similar dimensions but manufactured from manganese bronze material throughout; an ordinary top-hung gate, suitable for large or small openings; the "Bolton" patent shutter gate, and many other types, such as the top-hung mid-bar collapsible gate, and a half mid-bar collapsible gate.

Fredk. Braby and Co., Ltd., T.309.

This is an interesting stand, constructed in some of the steel components manufactured by the firm. It is built of pressed steel members, including steel dovetailed sheeting for walls, partitions and flooring (the whole finished with white cement), and pressed steel skirtings, window surrounds and door frames. Pressed steel stair and balustrading; metal-covered plywood, metal windows and doors; electric heating panels, copper piping, etc.; and zinc and copper roofing are also incorporated and demonstrate the application of metal products to modern building design and construction. A novel feature on the pressed steel stair is the use of "Alundum" rubber-bonded safety treads—a non-slipping stair covering which may be applied to any type of stair. During the last year Messrs. Braby have supplied products to several important contracts, in particular to the Mersey Tunnel, where over 400 stainless steel doors were supplied.

J. Brockhouse and Co., Ltd., L.220.

A full range of the firm's "C.C. Fires" is exhibited on this stand. All are attractively designed and demonstrate modern efficient practice in fire-grate design and construction, showing how one may enjoy the advantages of an open fire with all the convenience of a gas-fire, both in the same fireplace and both ready for immediate use. In the case of model "K" the gas fire is in front and, when not in actual use, is protected by a cover plate. The open fire is specially designed for burning coke. It is gas-ignited, the use of wood and paper being eliminated. Other variations of the fire are shown in a number of attractive models.

Bryce, White and Co., Ltd., H.151.

The entire construction of this stand, with the exception of lighting and signs, has been carried out by the firm's own joinery works at Redbridge, Southampton, and is built up entirely of materials which it sells. Over three dozen different designs in exterior and interior doors are shown. Particular interest is to be found in the flush inside doors and oak front doors, which are now manufactured at the firm's Redbridge Works. "Brycite" Columbian pine doors from Canada are also a feature, as well as examples of the established "Castle Brand" Swedish and Columbian pine doors from the United States. The firm's moulding mills in London, Southampton and

Bristol are showing sections of stock designs of deal mouldings, and the floor of the stand is laid with "Bruce" oak flooring.

"The Builder," Ltd., F.124, M.232, and Gallery 25, 26 and 27.

We published last week our first Exhibition number, which contained a complete alphabetical list of exhibitors and a double-page ground plan showing the positions of the stands. This week we publish our second Exhibition number, containing a full report of the opening ceremony, together with illustrations, a review of the exhibits, and other special features. Next week, our third issue will contain not only further descriptions of exhibits of interest, but reports of the meetings at and visits to the Exhibition by various societies and institutions, and articles by special contributors. Copies of all our special issues are obtainable on our stands.

A prominent and particularly interesting feature of our main stand (F.124) is an exhibition of models, specially made for *The Builder* and illuminated by electricity. These are as follows: "The Keep of the Tower of London" (a new and specially attractive model to scale, brought direct from the Tower of London), "Old London Bridge," "Mill Loch Arch," "London's First Waterworks," "Old St. Paul's," and "Westminster Hall Roof." Westminster Hall was built A.D. 1099, and the roof was rebuilt A.D. 1400. Our model of the roof truss shows the iron ties by which Sir Chas. Barry strengthened the roof in 1850. (Note: The ornamental members are omitted.) The steel reinforcement of the roof, rendered necessary by the ravages of the grub of the "Death-Watch" beetle (*Xestobium Tessellatum*), was carried out by H.M. Office of Works. This work is illustrated by drawings. The model and drawings are kindly lent by H.M. Office of Works.

The following publications are on sale: "Old London Illustrated," "Estimating for Builders," "Law Relating to Dilapidations and Waste," "Law Relating to Fixtures," "Everyday Science for Architects and Builders," "Powers of the Architect," "Designs for Small Houses" (new edition), "Bungalows of To-day," "Small Houses and Cottages," "The Master Builders' Handbook," together with a comprehensive selection of publications and text-books devoted to architecture and building.

In the Gallery (25, 26, 27) will be found a selection from the designs sent in for *The Builder* "Ideal Village" Competition, the assessor of which was Mr. D. Barclay Niven, F.R.I.B.A. These designs include the three premiated ones, namely:—

First Place (premium £50) to the author of design No. 3—Mr. Charles P. Meddick, P.A.S.I., of Bridlington.

Second Place (premium £15) to the author of design No. 23—Mr. H. H. Powell, B.Arch., A.R.I.B.A., of Heswell.

Third Place (Premium £10) to the authors of design No. 17—Mr. H. Heathman, L.R.I.B.A., and Miss E. D. Blacker, F.I.A.A., of Bristol.

A. A. Byrd and Co., Ltd., D.64.

Practical demonstrations are being given which show the sealing of water bursts under pressure with ordinary Portland cement and "Tricosal Rapid S3," also rendering percolating surfaces, etc. A working model demonstrates the resistance to hard wear of cement floor surfaces treated with "Tricosal," also the effect on untreated cement surfaces under similar conditions. The whole of this stand is decorated with coloured Portland cement waterproofed with "Tricosal," and the fascia signs on both fronts of the stand are written with "Tricosal" cement grout. A comprehensive display of "H.P." specialised technical and mechanical rubber hose and products exclusively for the use of builders and contractors for general and special purposes is to be seen, together with the latest types of "Metaform" steel shuttering for *in situ* concrete walls, columns, beams, floors, etc.

Cable Makers' Association, R.288.

This exhibit, which is a joint display prepared by the members of the association, is intended to be generally representative of the various types of cables used in electric light and power installations. These include rubber insulated cables, with various metallic and non-metallic protective coverings, in single core and multicore types. Special systems of wiring for houses, both in conduit and protected surface wiring systems, are shown. All types of electrical conductors, from fine instrument wires and flexible cords to high voltage transmission cables, are exhibited.

These types of cables are made by 19 of the members of the association, among them being Callender's Cable and Construction Co., Ltd., Johnson and Philips, Ltd., and St. Helens Cable and Rubber Co., Ltd.

George M. Callender and Co., Ltd., D.67.

The exhibit of this firm shows a pond in brickwork, lined throughout with "Callendrite" sheeting. In the centre of the pond is a column of loose porous bricks dampcoursed with "Callendrite." The iron railing surrounding the pond is treated with Callender's "Callendure" coloured bitumen paint. Examples of roof construction are also exhibited demonstrating the application of "Veribest" roofing on sloping surfaces, and "Veribest" multiple roofing on flat surfaces. A model is being exhibited showing the application of "Bitubond" building composition to a cavity wall. Poured hot into cavities formed by two-brick or stone walls, it is claimed that this composition searches and fills every interstice in the inner wall faces, rendering the wall impervious, non-conducting, sound- and temperature-proof.

Cayless Bros. (Battersea), H.162.

This firm is exhibiting a design in tubular steel scaffolding which forms a display for their "C.B.B." brands of tested building plant, including builders' ladders and barrows, painters' steps and trestles, hand trucks, portable towers, etc. A comprehensive show of patent telescopic ladders for various uses is on view, and the patent steel "Fix-Quick" trestles, of especial interest to the decorator, are also demonstrated.

The Cement Marketing Co., Ltd., F.118.

"Blue Circle" Portland cement and "Ferrocrete" rapid-hardening Portland cement, being so well known and their qualities so well attested, are not featured so prominently as the range of products for artistic concrete, these latter demonstrating the beauty of coloured concrete rather than the hidden strength of concrete for ordinary constructional purposes. By means of slabs, panels and pre-cast units it is shown that by the use of the following materials it is possible to produce concrete in any colour and with any textural finish desired: "Snowcrete"—British white Portland cement; "Snowcrete" Mixture—"Snowcrete" and special white aggregate mixed ready for use—supplied in gradings suitable for renderings and facings and also for structural work; "Colorcrete"—coloured Portland cement, rapid-hardening, buff and red, for coloured mass concrete, also a special range of twelve more brilliant colours for renderings and facings (not rapid-hardening); "Cullamix" (coloured cement and aggregate), in twelve colours mixed ready for use, graded specially for renderings and facings and also for dustless polished floors; "Tintocrete," white and coloured cement finish (matt or glazed), for application to concrete, brick, stone, etc., by brush or spray; water-repellent Portland cement—recommended for the backing coat for renderings, particularly where coloured cement renderings are to be applied. Sections of wall built with "SD" stock bricks, and panels of "Hydralime," which the company supplies, are also on view.

Central Equipment, Ltd., Bays, Gallery, 86.

The "No-Mast" Patent Aerial, which is here exhibited, enables every wireless owner to have an efficient outdoor aerial without the ugly pole or mast and untidy wires to disfigure the premises and the landscape. It is, too, easier and less expensive to erect than the mast aerial, and is neat and unobtrusive. Designed on scientific principles, the aerial consists of a 9-in. brush-like antennæ of thick copper strands enclosed in a 4½-in. heavy porcelain insulator, from the lower end of which projects a 50-ft. length of stout copper wire which is the lead into the set. Galvanised brackets are supplied for affixing the antennæ and as a stand-off guide for the lead-in wire. The "Siltit" hygro-metallic earth cartridge, another exhibit, has the lead-in wire as an integral part, and there are no screws or soldered connections to corrode and break away. The "Siltit" consists of a stout perforated copper cartridge containing a hygro-metallic compound which readily attracts surrounding moisture, even from the most arid soil, and from the atmosphere itself. The 8 ft. copper lead-in wire is part of the cartridge and passes through it to emerge at the lower end in the form of antennæ, which are spread in the soil like the roots of a tree, giving maximum earth contact with a minimum of resistance. It is claimed that, once fixed, the "Siltit" can be forgotten, for there is nothing to break or go wrong.

Claygate Brickfields, Ltd., S.304 and 305.

The special feature of this firm is a Claygate slabbed fireplace, which is made of the same class of bricks as used in their ordinary fireplaces. All briquettes are hand-made sandfaced, and are supplied in all those variations of colour which have become so identified with the "Claygate" old English fireplace. Nearly 100 different moulds are in use to produce these designs. Also shown are the standard and 2 in. facings in mottled and red colours. Another exhibit is of 2 in. brick mullions, which can be used with standard metal casements; as no wooden frame is necessary, the cost of upkeep is considerably lessened.

Coldair, Ltd., D.82 and 83.

Refrigeration is the subject dealt with on this stand. A series of machines is on view, designed specially for flats, new buildings and domestic requirements, consisting of: 5 cu. ft. built-in type, where all the component parts are supplied; 5 cu. ft. standard domestic refrigerator, self-contained; 5 cu. ft. table top model; 5 cu. ft. refrigerator complete with sink and storage space, with drawer not refrigerated, self-contained; 3 cu. ft. ditto, without drawer, but with a small storage space; 3 cu. ft. table top model. A service cabinet to suit hotels, institutes, hospitals, sanatoriums, etc., is an interesting new addition. An exhibition of a series of spray painting machines, complete with compressor, air receiver, spray painting gun, and a specially designed self-feeding apparatus, the "trickle charger," designed to supply fuel at a given rate for brick kilns, is also to be seen on this stand.

Craftplugs, Ltd., N.239.

With the development of newer forms of building construction and the multiplication of details of equipment there has arisen a widespread need for fixing and security devices, and the success with which this demand is being served may be judged from the exhibits on this stand, where is shown a complete range of wall plugs, "Super-hold" stud bolts, "Super-hold" stud bolt sockets, "Super-hold" anchor bolts and tools. Demonstrations of the many uses to which "craftplugs" may be applied are given every day.

Crane, Ltd., T.307.

"Whitehall" sectional heating boilers with water-cooled grate bars and insulated jackets—for large installations—are among the principal exhibits of this firm. "Carlton" sectional heating boilers, suitable for combined central heating and hot water supply for average sized houses, with vitreous enamel finish for installation in living room or kitchen, also in regular finish or with galvanised jacket for basement, together with the

"Regent" and "Ipswich" class of boiler, are also to be seen. The other products on show by the company include "Pall Mall" radiators with deflecting shield which largely obviate blackened walls and ceilings, hospital "Easyclean" radiators, with and without legs, the latter with specially designed brackets and stays.

Cuprinol, Ltd., N.244.

The various uses of "Cuprinol" wood and fabric preservative are shown on this stand. "Cuprinol" is manufactured from non-ferrous metals. It has the effect of penetrating the wood by means of solvents which leave these preservative metal salts in permanent union with the timber, preventing its destruction by boring beetles or fungi, such as dry rot. The following ways in which "Cuprinol" is of assistance to the builder are demonstrated on the stand: for treating new hardwoods and exterminating the powder post (Lytcus) beetle in joinery, fittings, furniture, or elm weatherboarding; for preserving old buildings or antique furniture from attacks by the "death watch" and furniture beetles, and as a means of rendering historic timbers safe from the possibility of attack; for stamping out dry rot in floorings and floor joists ("Cuprinol" can be used indoors, and can be painted, varnished or polished over if required); for preserving external timbers, beams and lintels, window frames, sills, and all external joinery; for fences, outbuildings, and garden architecture. It is made in dark and light brown and green, forming at the same time an attractive stain and preservative. A canvas grade is also manufactured for the prevention of decay and mildew in all forms of canvas and ropes. It is claimed to lengthen the life of tarpaulins and ropes indefinitely, and to preserve netting, sunblinds and sashcords.

E. Dechaine and Co., Gallery 65.

A special display is made here of interlocking roofing tiles—trade mark "J.D."—of which this firm are the sole distributors for the British Isles. Single, double and triple interlocking tiles of the "Mulden," "Du Nord," "Roman" and "Boulet" type are shown, and are obtainable in red or silver-grey, with ridges to match. An interlocking pantile is another exhibit which should interest the house builder.

Drew, Clark and Co., K.195.

A large variety of extension ladders are exhibited on this stand. The latest production of this firm, the telescopic travelling platform, is claimed to be a labour-saving device, as it takes the form of a collapsible platform which can be adjusted up and down. Another interesting exhibit is a ladder for use in attics, lofts, etc. The ladder is fixed in the roof space, and can be closed and slipped into the trap-door when not in use. It is claimed to be ideal for incorporating as a standard type into housing schemes. The company's other exhibits include the "Rap-Rig" scaffold, which is familiar to architects and builders, as are also the "Diamond" ladders.

The Educational Supply Association, Ltd., Q.281.

This stand displays on two stories the various types of folding and sliding "Esavian" doors and windows which should be of considerable interest to education and hospital architects. On the ground floor is a set of semi-circular folding loggia doors with a weathered cill, fitted flush to the inside floor level, and also a set of the "Esaround" garage doors and an "Esavian" folding partition which folds flat against the wall, and does not project in the room in any way. On the first floor "Maxlite" and "Morlite" windows are incorporated and an "Esavian" metal folding window, all with patent concealed fittings housed within the thickness of the leaf, and thus entirely protected from the weather when the windows are shut.

Electrolux, Ltd., R.290.

This firm is displaying a comprehensive range of refrigerators which are automatic, motorless, and silent, and have capacities from 1 to 45 cu. ft. Of special interest is an improved "Minor" model, which is claimed to be the lowest-price self-contained automatic refrigerator offered, and also an entirely new cabinet, the M1 model, made especially for "building-in" to the structure of the small house or flat where space is limited. In addition, a range of Electrolux water softeners is exhibited, from portable types to mains models. Portable models can be supplied in four different shades.

Samuel Elliott and Sons (Reading), Ltd., J.180 and K.205.

High-class joinery is a feature of the exhibits on this stand. Two complete rooms have been prepared, one a Tudor panelled room with oak beams and panelling, and the other a modern panelled room in Australian walnut, with mantelpiece. Various flush doors in hard and soft wood; a selection of period mouldings; parquet floors and spring floors, and samples of panelling and veneered work in various hardwoods are tastefully displayed. On Stand 205, Row K, Messrs. Elliott show two revolving doors. These doors are constructed with the idea of showing the simplicity of the mechanism and also to demonstrate their four-compartment door and their latest invention of a three-compartment door. The doors are of modern design and should be an interesting exhibit to anyone requiring the latest types of revolving doors.

Elsan Manufacturing Co., K.191.

A comprehensive range of "Elsan" chemical closets is exhibited, including all special cheap models. Many of these are particularly convenient for transportation purposes and fulfil the demand for sanitary accommodation for road contractors and on building estates. They can be packed up into a very convenient size and do not require the fitting of any ventilation pipe. Among the other models exhibited are the "Elsan" permanent (self-drainage) types, new self-flushing portable models and standard portable models, suited for all classes of buildings without public sewerage and water service.

F. H. Evans and Co., Gallery 31.

The really efficient washerless tap is an ideal which the builder has long sought. A tap-valve which is claimed to meet all the objections made in the past is shown by Messrs. Evans on this stand. The "Evans" valve is of the hollow piston type, with a special seating which renders leakage impossible. The valve has been tested by the Metropolitan Water Board to 500,000 turns without showing leak or wear. This is equal, it is stated, to 10 years' normal use. Valves have been under normal use already for 3½ years, on hot and cold water, without leak or signs of wear. These valves have been specified for the new council baths at West Ham, Leyton and Poplar, as well as by the War Office and the London County Council.

The Everlasting Tile Concrete Products and Granite Supplies, Ltd., G.135.

This company's stand shows to full advantage the large range of colours now available in roofing tiles. Shown on the exhibit are the various types of tiles manufactured by the company, which include: plain tiles, interlocking tiles and pantiles; H.R. ridge and hip, taper hips, bonnet hips, and special curved tiles for bays. The firm makes a speciality of the manufacture of tiles for architects to their own colours.

Ewart and Son, Ltd., K.189.

Some new types of geysers and multi-point water heaters are here shown. The new model, "Califont de Luxe," is of particular interest owing to new features introduced and to the fact that all the fittings are enclosed. The outer casing is of hard-fired white porcelain enamel and a new type of chromium-plated wall bracket for easy fixing is provided. The heater supplies hot water at the rate of 3½ gallons per minute in a continuous flow at any hour of the night or day at the turn of the tap. The new "Vivo" water heater, of which large numbers are in use throughout the country, has proved its merit and is specially useful for flats and small houses, to provide a service of hot water without storage. Another novelty is the new "Brilliant" geyser, having a porcelain enamelled casing and enclosed fittings, and supplying hot water to lavatory basin and kitchen sink. There is also an interesting display of coloured porcelain enamelled baths and lavatory basins. A special feature of the exhibit is an example of the firm's conical roll system of copper roofing, which ensures a permanent watertight roof. The "Emperor" cowl for curing smoky chimneys is also shown.

The Expanded Metal Co., Ltd., G.148.

The company's exhibit consists of specimens of various meshes and weights of "Expamet" expanded steel, which are applied to innumerable purposes. The "Expamet" expanded steel of the larger meshes is used chiefly as reinforcement for all forms of concrete and fire-resistant construction; and the smaller meshes in many other ways, such as open meshwork for partitions, shop divisions, fencing, flooring, etc. The "BB" Expanded Metal Lathing and "Ribmet" are shown in actual use for ceilings and solid and hollow plaster partitions. A special feature is the "BB" lathing dome, and the metal lathing can be used for practically any type of plaster construction; it affords a level and rigid meshwork surface to which plaster can be applied quickly and easily. The other exhibits include the "Ribmet," the "Exmet" reinforcement for brickwork, and a model which incorporates various "Expamet" expanded metal products.

Field and Palmer, Ltd., Gal. 45.

A large display of interesting samples of composite flexible flat roofing for defective asphalt zinc and concrete roofs; "Macflex" roofing for flats of houses, shops, warehouses, etc., is to be seen on this stand. "Fi-pa-led" dampcourse and "Superseal" bitumen coatings and mastic cement are also shown and should be inspected by house builders.

Sidney Flavel and Co., Ltd., L.214.

A carefully designed range of gas insets for building-in with tiles, marble or other wall substances is exhibited by this firm. They may be fixed by several alternate methods, and, being supplied in size-multiples of 3 in. and 4 in., building-in is a very simple matter. Closely related is the attractive range of gas-mantle registers and the applicable inset fire. The registers are listed in various colours, art colours, metal tones, or simply primed grey for painting. The "Radiant-Panel" gas heater exploits the fact that a dead black surface is an outstandingly effective heat radiant. In the appliance produced by this firm the black panel is carried in pleasing upright and elevated designs; there are, in addition, models of the heater for building-in flush with the wall face. The "Metro-Log" gas fire unit is a realistic reproduction of the old-world wood fire, artificial logs giving a good heat. In the "Lumetro" gas fire the incandescent fuel bed is composed of irregular shaped small pieces of fuel in a firebrick setting. The fire is supplied in independent and basket styles. Several examples of the firm's gas cookers are also shown.

Messrs. Robbins and Co. also have an exhibit on this stand. The faithful reproduction of "period" style grates is one of the firm's activities. Several beautiful examples of hob grates and dog grates are shown in approved settings. Many of the modern grates and interiors make effective use of stainless steel. The "Fire-in-the-Hearth" grate, a well-known barless type in which economy of fuel is an important feature, is seen in various styles and treatments.

Gas Light and Coke Co., Q.283.

This stand shows two examples of the type of all-gas kitchen that is being used on modern housing estates. One of the kitchens has been

specially planned by an architect, and the other is similar to that being used by Messrs. Waddington and Son in the houses which they are putting up at Kingsbury. Cookers can be had in several attractive colours, to tone in with the scheme of kitchen decoration. The new water-heaters are self-operating and give as much hot water as is required without work and waiting. They are finished in coloured enamel with chromium fittings. Gas washing machines or wash coppers and a gas refrigerator also form an interesting part of this exhibit.

General Electric Co., Ltd., T.311.

On this stand is a display of numerous electrical appliances and fittings of particular interest to builders and architects. The stand is divided into five main sections, as follows :—modern lighting fittings; electrical appliances for the kitchen and home laundry, including "Magnet" water heating and immersion heater conversion systems, cookers, washing and ironing apparatus; architectural feature illuminated by "Osira" colour floodlighting; domestic heating, electric fires, tubular heaters, etc.; and electric installation accessories, "Ironclad" switchgear, etc., bells and telephones. A new range of both portable electric fires and inset fires are to be seen. The centre of the stand is given over to a demonstration of colour floodlighting by the new "Osira" lamp.

J. Gliksten and Son, Ltd., E.97.

Messrs. Gliksten exhibit various classes of mahogany, oak, walnut, teak, whitewood, etc., especially selected for the building and allied trades. On the same stand their two subsidiary companies are showing timber products. The National Plywood Corporation, Ltd., display sample sheets of various quantities of plywood, taken at random from their large and comprehensive stock; while Gliksten Doors, Ltd., show a wide range of doors from their stock of British and imported Columbian pine, Swedish redwood and solid oak doors. Flush doors, including "Solidcor" with pine-block and gaboon-laminated centres, and "Solite" light-weight flush veneer doors, are displayed in variety. Door furniture, the "B.P." all-British, Canadian-made insulating board and wallboard, and "Gliksten" hardboard and balsam wool insulating blanket, made in U.S.A., are other exhibits likely to attract attention.

Goodlass, Wall and Co., Ltd., Q.278.

The exhibit of this stand consists of four central columns painted in "Swansdown" white enamel. Four square columns demonstrate some of the attractive shades of gloss "Combinol," broken-colour effects in blue-green and gold, which are displayed to advantage on two other fluted columns. The interior of the stand consists of four rooms and a corridor. In the first room the walls are treated with flat "Combinol," the woodwork being scumbled with "Brustane," and the frieze to harmonise. The second shows two panelled schemes, one in fine graduated blues and gold, and the other in brown. The third room shows an example of rag-rolling in grey and silver, whilst the fourth is finished with graduated modern colour effects in special glaze and stainers; egg-shell varnished. In other rooms a number of modern finishes are displayed. In the corridor may be seen a dado in "Artemo" plastic paint.

Greenwood and Hanson, C.36.

Greenwood's "Anti-Vak" trap is here exhibited in the well-known lead pattern, also in both cast-iron and light-weight chromium-plated alloy, of easy-cleaning pattern. Demonstrations are also given on a specially designed apparatus which not only shows the high resistance of this trap on severe syphonic "pulls," but demonstrates the strong scouring action through the by-pass air pipe. Glass replicas of this trap and of ordinary deep seal traps are used to show that when these "Anti-Vak" traps are installed, anti-syphon pipes are unnecessary.

Guilliet, Sons and Co., Ltd., C.40.

A comprehensive display of woodworking machinery is to be seen on this stand, including the following: "MVO," high-speed motorised vertical bandsaw, heavy type; "BRBm 2," dimension circular saw bench, for ripping up to 24 in. wide, travelling table for cross cutting up to 24 in. wide; "BLD," high-speed straight line edger and ripping saw; "CFMm.," heavy type motorised surface planing machine; "LAFm.," improved combined surface planing and thicknessing machine; "LGKm.," heavy type combined planing and thicknessing machine; "DJQm.," improved motorised five-cutter planing and moulding machine; "KGB," extra high speed five-cutter planing and moulding machine; "QG," heavy vertical spindle moulding machine; "EYB," high-speed routing machine, with improved type of drive; "XJDm.," improved motorised semi-automatic multiple spindle dovetailing machine, with instantaneous clamping device; "EBY," improved motorised single ended tenoning machine; "DGPm.," heavy type motorised chain and hollow chisel morticing machine; "PBUm.," improved motorised triple drum sandpapering machine; "PBBm.," improved overhead double belt sandpapering machine. All builders and contractors who wish to keep in touch with the latest developments in wood-working machinery should make a point of inspecting this exhibit.

Halliday Boilers, Ltd., H.160.

A reliable boiler designed to give constant hot water in all parts of the house is a piece of plant which is always of interest to builders. One such is the Halliday plated boiler, which is fitted in kitchen and gives an abundant supply at low cost. Other exhibits are the Halliday white enamelled combination boiler and tank; a standard boiler; boilers in various coloured enamels; the Boyle copper ventilator, and other ventilators for all purposes. A feature is made of periodic demonstrations of boiler and ventilator manufacture.

Hammond Bros. and Champness (1933), Ltd., G.150.

On this stand different types of "H. and C." electrical and hydraulic lifts are shown. Special features include an electric passenger lift car, made to architects' design, for a modern block of flats; electric service lift, working with automatic push-button control, arranged for three floor service, with safety contacts and indicators; a disappearing dinner lift, with self-sustaining gear, specially designed for private houses, nothing being visible on the ground floor when lift is not in use; a standard hauling rope type of dinner lift, with self sustaining gear, suitable for restaurants, offices, etc.; also an electric lift gear component showing general construction. A special feature of the electric lifts is the Vernier-cushion control.

G. A. Harvey and Co. (London), Ltd., E.99.

The exhibits on this stand include a varied assortment of ventilators, both painted steel and copper, zinc and copper roofing, also a selection of steel equipment suitable for the office, works and the modern home. Perforated metals, one of the specialities of this firm, are represented by screens and screen plates suitable for gravel, sand and ballast, also cement machinery plates. Wire window guards of every design are also to be seen. Mild steel tanks, cisterns and cylinders are shown, also gutters from 18-gauge material to ⅜ in. plate, with a choice of designs.

Haskins Rolling Shutters, G.150.

Rolling shutters, gates, and steel doors are being shown on this stand. The Rolador "Minor," a lightweight shutter of "push-up" operation, suitable for average size openings in commercial buildings; fire resisting interlocking steel rolling shutters, constructed in accordance with the latest requirements of the L.C.C. and London Fire Brigade, and fitted with fusible link release apparatus; miniature steel interlocking rolling shutters; rolling steel portcullis shutter; and various types of fire escape stairs, wire enclosure work, collapsible steel gates, and ¼-in. steel plate doors, are also on display, the last named constructed to comply with the requirements of the London County Council.

John Healey (London), Ltd., D.74.

The principal exhibit is a "Cristallux" dome light in the roof of the stand, formed of reinforced concrete inset with lenses of brilliant highly resistant glass placed in such a way that brilliancy is assured from whatever angle the light is viewed. Surrounding the dome light in the roof are various types of concrete-glass roof lights. The walls of the stand are glazed with concrete-glass lights of various patterns. Also exhibited are the latest types of toughened lenses for roof lights, one type being silvered to obtain increased reflection. All the glass exhibited is of a resistant nature and is guaranteed.

Highways Construction, Ltd., E.91.

This exhibit demonstrates the general uses of natural rock asphalt in building construction. The stand floor represents the flat roof (or roof garden) of a modern building, access to it being gained through the doorway formed in the bulkhead erected over the stairway. The flat roof is partly paved with coloured asphalt tiles, known as "Colopavets," and also with natural-colour asphalt tiles—marketed as "Monopavets." The bulkhead has been designed to show the various finishes which can be executed in standardised natural asphalt rock mastic. Samples of various coloured asphalt tiles are also shown. "Pavetpol," a special polish for cleaning and polishing these tiles, and "Shepfast" adhesive composition for use in laying wood-block and boarded floors are also exhibited.

Ideal Window Co., Ltd., D.68.

The patent ideal "Stormproof" wood window, which is designed especially for use in the most exposed positions on the coast and in the country, is to be seen on this stand. The window is designed to be stormproof, draughtproof, dustproof, and the hinges rustproof. With this window casements do not require easing. The patent sash joint has also far exceeded, we learn, expectations in the matter of strength. Extending hinges are provided to these windows, making it possible for the outside to be cleaned from inside the room. These windows can be made to any size, according to requirements, and are not confined to standard sizes. The other exhibits on this stand are examples of panelling, shopfronts, stairs, and every description of joinery.

The Interoven Stove Co., Ltd., F.123.

In view of current developments in housing and slum clearance, this exhibit has particular interest. It includes Super "Interoven" stoves and the new "Selfix Interoven" as used by numerous housing corporations, being suitable for economical cooking and supplying hot water for all domestic uses. Also on view are "Cheerio" domestic boilers made in wrought steel and in various finishes, which can be used with closed or open fire, and being fitted with a speial type of shaking bottom grate. Other exhibits are: "Latona" and "Otter" radiators, an economical form of heating requiring minimum attention; "Bewty" barless fire fronts, adjustable to suit any fireplace; and "Boula" reflector lamps, which, it is claimed, give twice the light at the same cost.

Iffley Brick Fireplaces Co., Ltd., K.191.

The Iffley brick fireplaces, here exhibited in a number of attractive designs, are slabbed from selected kiln-burnt bricks in a wide range of colours—antique, multi-coloured rustic, cherry red, dark plum, etc. The bricks are also supplied in sets to architects' designs. The patented method of constructing an Iffley brick fireplace is claimed to obviate disfigurement from the pointing cement. An illustra-

tion of the winning design in the firm's recent Brick Fireplaces Competiton, by Mr. A. Douglas Robinson, F.R.I.B.A., is given on page 448. The "Elsan" chemical closets, which are also exhibited, embrace new features, particularly in the portable conveniences for men on constructional work, and many improvements in the bungalow and household models have also been made.

A. Johnson and Co. (London), Ltd., C.35.

On this stand are exhibited three typical examples of the company's combined "Savestane" stainless steel sinks and draining boards. These products are claimed to be thoroughly hygienic and economical of space. They are shown in combination with gaily coloured cabinets which make for brightness in the kitchen. Examples of table tops in "Savestane" stainless steel are also shown. In the efficient use of space in the small kitchen, the table top can be made in one piece with the sink and draining board, and designed to follow the contours of the room, giving a continuous working surface of shining steel.

G. Johnson Bros., C.48.

Interesting items in this exhibit are metal mouldings drawn on hardwood cores, used in the manufacture of frames, sashes and doors, the wood being sheathed with bronze, stainless steel and other metals. Mouldings are made plain, and ornamental castings supplied to cover the joints and angles, so that the builder can work these together as easily as he does his wood front. Castings, free from sand-holes, are to be seen, and architects should look into the display of name plates, etc., of which the application of ceramic enamel to bronze in opaque and iridescent colours is a particular feature.

Jones and Attwood, Ltd., J.185.

Amongst the exhibits shown by this firm is a range of efficient boilers for a variety of domestic and other purposes, including the "Cultivatum," the "All-Night," the "Domestikatum," the "Bon-Fire" and the "Batheater" combined boiler and cylinder. The firm are also showing general heating goods, hot-water pipes, connections, etc.

T. C. Jones and Co., Ltd., J.172.

The chief exhibits on the stand are the "Jones" Super Petrol Crane in its latest form, a new ¼-yd. "Smith" Excavator, and the stand itself is constructed by the firm's structural department as an exhibit of the work which they are doing. The petrol crane has proved itself during the past years as an economical and trouble-free method of hoisting all classes of material used on building work, and the latest design includes many interesting features which make for speedier operation, without in any way affecting the safety and ease of operation for which the cranes are known. The ¼-yd. "Smith" Excavator should appeal to builders who are anxious to reduce the costs of excavations such as basements, foundation trenches, or site levelling. Weighing only seven tons, and being mounted on caterpillar tracks, these machines are ideal for swift operation in confined spaces, and several have already been included in the company's hire fleet and have given satisfactory results.

Kerner-Greenwood and Co., Ltd., C.49.

The visitor approaching from either of the main entrances will first be attracted by the lily pond which forms one end of this stand and provides a practical example of the use of Portland cement, waterproofed with "Pudlo" brand powder, for the lining of ponds and tanks which are required to retain water, and also for the waterproofing and prevention of disfigurement by crazing and staining of artificial stonework, of which material the ornamental coping to the pond is made. The statuette which forms the central feature of the pond is also cast in cement, waterproofed with "Pudlo," and was modelled by Mr. P. G. Bentham, A.R.B.S. At the back of the pond is a wall built with breeze concrete blocks, selected because of their great porosity, and thus providing the better proof of the watertightness of the ¾ in. stucco rendering applied to the face of the wall, which is also waterproofed with "Pudlo." A stream of water will run down the face of this rendering during the whole time that the exhibition is open. In addition to other exhibits of a practical character are several types of apparatus by means of which specimens of waterproofed cement mortar are subjected to pressures up to 300 lb. per square inch.

J. A. King and Co., Ltd., F.113.

The major portion of this stand is devoted to "Glas-crete" constructions (reinforced concrete and glass), and show samples of several of the various types used for roof, floor and pavement lights. The front of the stand takes the form of twin towers in "Glas-crete" window construction, connected together by a "Glas-crete" canopy, immediately behind which there will be a barrel roof light 12 ft. long and 7 ft. 6 in. span. These windows need no painting whatever. "Cristol" glass construction is exhibited in the form of a laylight having the centre portion dropped to form a lamp. This construction is an electro-copper glazing with units of high relief moulded glass, and is employed for laylights, domes, lamps, etc. Various types of "King" concrete wall and partition blocks, in thicknesses from 1½ in. to 9 in., are being shown, together with the "King" concrete gas flues, pumice partition blocks, plaster slabs for partitions, pugging and ceilings, and other "King" specialities.

Kurt Erlach, Ltd., Gallery 21.

On this stand is exhibited a full and complete range of their "Volspray" spraying apparatus. The most notable of these exhibits is the "Volspray" 1/A, which has for many years enjoyed considerable popularity amongst builders and decorators. This small but efficient plant has as special features, portability, the fact that it can be plugged into any domestic light or power point, is fitted with a universal motor, and is capable of working a full-size standard "pistol." As we learn that many art schools are now training students with the "Volspray" 1/A, there should be no shortage of reliable and efficient spray decorators for the master decorator who decides to adopt this method of finishing. Another exhibit of interest is the "Volspray" 11/ZW, an electric plant with a high output and extreme portability. This plant is also fitted with a universal motor with a voltage range of from 200 to 250. Mr. W. C. Andrews, who is well known in the decorating and painting trade, is in daily attendance on the stand, and cordially invites old and new friends to discuss with him the various plants on show.

Langley (London), Ltd., and the Courtrai Du Nord Tile Co., Ltd., E.93.

On this stand clay roofing tiles in a great variety of coloured and glazed finishes may be seen. There are a number of different models, including: Courtrai-Du-Nord tiles, which are supplied in ten separate and distinct matt and glazed colours; Beauvais roofing tiles, natural red and mottled; "D and G" brand interlocking pantiles, supplied in 15 separate and distinct matt and glazed colours; Cloister roofing tiles; and "Sterreberg" interlocking pantiles, supplied in 12 different matt and glazed colours. An architectural model of a small housing estate is on view, showing the effect of the different matt and glazed colours when employed side by side or in opposition. The houses on this model are interchangeable. A display which gives a useful index of the lasting qualities of these tiles are the specimens of glazed roofing tiles which were originally laid on roofs in 1884, having lately been taken off for Exhibition purposes. A complementary exhibit is Langley's untearable roofing felt, which may be laid direct over the rafters, without any other reinforcement. "Stelcon" steel-clad flags and anchor steel plates are industrial flooring specialities designed to resist severe wear and tear. Samples are also given prominence.

James Latham, Ltd., H.154.

The stand has been specially designed to illustrate the various departments and interests of this firm. The hardwood department in the form of a timber room displays a great variety of seasoned hardwoods of domestic, Empire and foreign origin, and demonstrates the excellence and careful grading of all hardwoods of "Mahtal" brand, particular attention being given to home and Empire timbers. The walls and ceiling of the office have been panelled in various types of "Mahtal" graded plywood panels. Another feature of this stand is the exhibition of finely figured Empire and foreign woods in veneer selected from a wide and varied stock of decorative hardwoods. The whole floor area of the stand has been utilised to demonstrate "Mahtal" kiln-dried floorings in various types of timber. The stand also shows an excellent range of "Mahtal" hardwood flush laminated doors.

Thomas Lawrence and Sons, E.102.

This firm's exhibit again takes the form of a garden pavilion, or summer house, with dwarf wall and piers surrounding the front. The facings used in the erection of the building are all genuine hand-made sand-faced bricks of the "T.L.B." brand. A garden ornament and other specimens of carving in rubbers, as well as samples of many of the firm's special products, are also to be seen. The whole of the carved rubber work has been specially prepared and fixed by Mr. Pye, of Banstead, Surrey; while the building has been carried out to the design of Mr. Edgar Ranger, F.R.I.B.A., by Messrs. E. H. Burgess, Ltd.

The Limmer and Trinidad Lake Asphalt Co., Ltd., F.120.

Every up-to-date application of asphalt in relation to building construction is shown on this company's stand, and the exhibits deal not only with roofing and dampcoursing, but with such accessories as insulation and decorative flooring. The progress of Trinidad lake asphalt from prehistoric times to the present day is illustrated.

Liner Concrete Machinery Co., T.308.

Exhibited on this stand is a complete range of "Liner" Concrete Machinery and Moulds, including the following new exhibits: a portable engine-driven saw bench; a "Cumflow" mixer, having a revolving removable pan and rise and fall mixing star; interlocking and Broseley tile hand machines, turning out first-class concrete tiles with a fast rate of output; a patent brick machine, making six plain or frogged bricks per operation on the same wooden pallets in 20 seconds (output 3,000 bricks per day); a "Cumflow" mixer with rise and fall mixing star. Other already well-known "Liner" machines on view include the following: "Liner-Junior" tilting-drum concrete mixer, 5/3½ batch capacity; a patent roller pan mixer, three portable models being exhibited; a "Liner-Junior" concrete mixer; rotary drum concrete mixers, of which a 10/7 machine is on view. This machine has several novel features, as follows:—(1) the drum is mounted on and driven by rubber-tyred rollers which dispense with the usual gear ring or chain round the drum; (2) a free engine or out-of-gear device dispenses with a clutch; (3) the hopper control is novel as the brake is applied when the control level is in the centre of its arc of movement. Other exhibits include concrete slab, block and brick machines, concrete vibrators, and a wide range of concrete flag, kerb, fence post and other moulds.

The London and Midland Steel Scaffolding Co., Ltd., O.261.

This exhibit of patent steel tubular scaffolding and other tubular constructions comprises many items of interest. The drop-forged British steel, patent double coupler, for steel scaffolding and all classes of tubular

construction, is designed for use with plain-ended tubing, its special features being that it has a double grip on the standard, which ensures safety, non-slip and great strength. This is a one-piece coupler, and the erection of scaffolding with it is extremely simple. The patent putlog coupler, another useful exhibit, is very simple to secure and has no projection to interfere with the wooden scaffolding boards. Then there is the patent putlog head, designed to eliminate costly and ugly putlog holes. Other exhibits include the patent split joint pin, which has a rapid action, half a turn of the bolt firmly securing two tubes together end to end; the patent drop forged quadrant swivel coupler, designed to fix or lock at any angle, 0 to 190 deg.; also patent steel guard board clips, reveal pins, base plates (both plain and adjustable), solid forged steel castors with ball bearings and rubber tyred to carry heavy loads, special box spanners suitable for construction of steel scaffolding, and all other fittings and component parts of steel scaffolding. Burton, Delingpole and Co., Ltd., has on this stand an exhibit of weldless steel flanges, specially manufactured for the heavy oil industries; tube fittings and drop forgings of every description. The British Castings Co., Ltd., has a comprehensive exhibit of building requisites.

London Brick Co. and Forders, Ltd., H.158.

This stand has been designed by Mr. Julian R. Leathart, F.R.I.B.A., to display the various types and shapes of "Phorpres" bricks, of which the production is now more than five millions daily. The varying textures and colours of the different types of bricks have been arranged by the architect to produce a definite surface patterning in which the darker rustic facing bricks form a base to the lighter colour of the upper walls. Included in the wall surfaces are panels of hollow partition blocks, which are now manufactured by the company, and of "Phorpres" cellular bricks sectioned to show the multicellular form of wall obtained by their use. This brick, whilst being stronger than many common bricks, is by test 22 per cent. lighter than the standard "Phorpres" brick, and is therefore of great value in steel-frame structures; in ordinary brickwork the sealed airspaces give improved insulation of sound, temperature, and moisture. Samples of special bricks, partition blocks, land drainpipes, road stone, granite chippings, and other products of the company are exhibited.

London Sand Blast Decorative Glass Works, Ltd., E.100.

Modern glass decoration—including mirrors of modern design, engraved and embossed glass for doors, windows, screens, etc., glass-covered furniture, and glass for lighting fittings, etc.—forms the chief exhibit on this stand. These types of decoration are most suitable for private houses, hotels, cocktail bars, theatres, etc. Builders and shopfitters should be interested in the many types of signs and glassware which also find a place.

W. Lusty and Sons, Ltd., O.259.

A selection of "Maidsaver" kitchen equipment, comprising kitchen cabinets and kitchen fitments, is to be seen here. A variety of kitchen cabinets, in polished and enamelled effects, together with kitchen unit fitments designed to be built into a recess or to completely fit in one side of a kitchen, should interest every architect and builder, as they ensure orderly storage of all necessary kitchen utensils in the most compact and labour-saving form, and should prove a strong sales feature in any new building estate or block of flats. Any colour scheme required can, we learn, be effectively carried out.

The Merchant Trading Co., Ltd., G.133.

The exhibit of this company forms part of the Canadian Government exhibit, and includes the various Canadian products for which the company act as sole agents and wholesale distributors in the United Kingdom and Irish Free State. "Beaver" wallboard, "Kenmore" board and "Donnacona" insulating and building board are three Canadian products widely used in their respective spheres. "Beaver" board is used for renovating buildings of every type, panelling walls and ceilings, partitioning, etc. Standard board is made of best selected fibre, 4-ply, approximately $\frac{3}{16}$ in. thick. It has a pebbled finish one side, which is ready sized for decoration. "Kenmore" board is similar, but without the pebbled finish one side. Both boards are manufactured in various stock sizes. "Donnacona" is a combined insulating and building board made in Canada of Canadian spruce. It has two surfaces—one side textured and the other smooth. The textured surface provides a beautiful decorative effect, either in its natural state or treated with paint or distemper. Its uses are manifold, the most important being for heat and cold insulation, to prevent condensation, for sound absorption and acoustic correction. "Britco"—British-made—doors, also on view, are available in a wide range of patterns and sizes.

Millars' Machinery Co., Ltd., O.260.

High-grade concrete-making machinery is shown here. Millars' 14/10-NT closed drum concrete mixer, a high quality machine, fitted with automatic power loader and vibrator, and having an 8-h.p. petrol engine, with stub axles arranged for end or side discharge,, and a capacity of 125/140 cu. yds. per 8-hour day, is a principal exhibit. A 4-ft. 6-in. dia. roller pan mixer, fitted with 5-h.p. petrol engine, and suitable for sand/lime, sand/mortar, black mortar and brick rubble mortar, makes another interesting display. The "R" model 'tructractor," which has a British-made Ford industrial engine, and a 30-cu. ft. end dump body, should prove a valuable addition to the builder's plant. The Millars'-Jaeger 7/5-SE tilting drum type concrete mixer, which has no loader but is fitted with a 2-h.p. petrol engine, and the 6/4-L tilting drum type concrete mixer, with automatic loader and vibrator and a 3-h.p. petrol engine, makes this stand of increased interest. Hoisting plant, pumps and concrete carts are a further part of a most comprehensive display.

W. T. Mitchell and Co., Ltd., O.262.

The Hot-Wash geyser is to be seen on this stand. It is claimed to provide abundant hot water at an instant's notice, and at a reasonable cost. Type 20M (1 gal.) is fitted with concealed automatic valve and thermostatic control; it is designed for sinks, dental surgeries, hairdressing saloons, etc., and is supplied in white porcelain and chromium finish. Types 25a and 50 (2½ gal.) multipoint heaters, and Type 75 (3½ gal.) multipoint heater are also shown in a variety of finishes. These two last are fitted with concealed automatic valve and thermostatic control.

The National Flooring Co., Ltd., L.211.

Here is a flooring exhibit of uncommon interest, comprising and demonstrating parquet flooring in all kinds of hardwood from ¼ in. thickness; patent spring portable parquet dancing floors in hardwoods; spiral spring dancing floors; oak "Parlok" panelling; "Parlok" wood-block flooring in all kinds of woods; floor surfacing and polishing by hand or machine; non-cracking terrazzo and mosaic flooring; and composition flooring in all colours.

R. H. Neal and Co., Ltd., G.136.

Messrs. Neal are showing an entirely new model of their "Rapid" tubular mast platform hoist—the mast hoist with a rotating platform. This is shown operating in conjunction with tubular steel scaffolding, for which it is particularly adapted. The new type of improved steel tubular mast is used, and the platform is arranged so that it can be swung around the mast on to the building at any height, giving complete safety in operation. The new hoisting unit is most compact, and is self-contained in enclosed steel housing; the new winch embodies the special safety load-sustaining device which has long been used on Neal's "Rapid" petrol cranes. It is claimed to give absolute safety for even unskilled operators, as the load cannot be accidentally dropped, as is possible with the ordinary type of friction winch. The new "Rapid" straight-flow diaphragm pumping set, the latest model of the "Rapid" 1-ton contractors' petrol-driven rail crane, and new models of the 6-cwt. and 12-cwt. sizes of "Rapid" petrol cranes are on view. The 6-cwt. size is shown with the self-raising mast.

Nobel Chemical Finishes, Ltd., R.286.

The chief exhibits on this stand are the "Dulux" range of products. These are based on a synthetic vehicle which has outstanding characteristics in durability and hardness combined with great flexibility and adhesion. The latest addition to the range, which includes glossy and flat finishes for exterior and interior decoration, is a brilliant non-yellowing white enamel. Another interesting item is "Dulux" aluminium, which may be used as a finishing coat or as a primary or sealer coat under the glossy "Dulux" or "S.E.G." (oil type) paint. "Frestex" plastic paint is shown in the form of pictorial relief panels; other panels display "S.E.G." super elastic gloss, water paints, flat oil paints, and a full range of varnishes; and inside there is a decorative frieze. Parts of the stand are finished with "Petrumite" imitation stone paint, which gives a surface resembling stone.

Anselm Odling and Sons, Ltd., F.111.

The chief exhibits on this stand are blocks and samples of fire stones. These include the white and coloured marble, onyx, alabaster, etc., in great variety; examples of Scotch, Norwegian and Swedish granites. A selection of marble columns, pilasters, wall linings, steps, balustrading and flooring, etc., and a display of marble altars, reredos, fonts, and church work, besides marble period and modern chimney pieces, bolection moulds, etc., is also on view. Altogether this stand has a pleasing effect and should be of interest to all.

Frederick Parker, Ltd., Q.280.

A wide range of contractors' machinery is exhibited on this stand. The "Parker" roller pan mixer, for dealing expeditiously with such materials as sand-lime mortar, sand-cement mortar and hair plaster, and also with wet or semi-dry concrete where small aggregate is used, has a pan of 4 ft. 6 in. diameter, but smaller and larger sizes are available, having 3 ft. 6 in. and 5 ft. 6 in. diameter pans respectively. Hand screening is avoided, small pebbles and lumps in the sand and lime being crushed during the mixing operation, and wastage of material has also been eliminated. The mixer will also crush clinker. Running costs are claimed to be low. The "Parker" hoist complete with engine, has been redesigned and forms a very compact outfit for hoisting and haulage purposes. The "Little Giant" concrete mixer, Model 3½G, has an important improvement in the form of a patent adjustable tilting stop to the mixing drum, allowing for five positions of the drum, mixing either side. This provides the correct angle of the drum for mixing every kind of aggregate, the adjustment being carried out in under 60 seconds. The firm have for many years specialised upon the loaded type mixer, and it is claimed that the latest model has a capacity of 7/5 cubic feet, with an output of 45 to 60 cubic yards per day: it is driven by a 3½ b.h.p. "Lister" petrol engine. An automatic water tank is supplied, and the mixer can be had with or without the addition of a barrow hoist, and is also fitted with swivelling wheels if required. Other sizes available. Other interesting exhibits are the "Monarch 8 in. by 5 in. brickbreaker fitted with 3½ b.h.p. "Lister" engine, and "Parker" steel barrows.

Patent Impermeable Millboard Co., Ltd., P.265.

On this stand are exhibited the well-known

building and insulating boards manufactured by this company. The stand itself is constructed with "Insulwood" and "Sundeala" insulation boards, as shown in the reception-room, which has "Sundeala" decorated leather panels. "Insulwood" is a waterproofed insulating board made in three thicknesses, ¼ in., ½ in. and ¾ in. "Sundeala" is shown in three qualities: "K" quality for ordinary interior linings; "A" quality for high-class panel work generally, either interior or exterior. Ant-proofed boards for use in the African and Indian markets are also shown. Many fine decorated specimens are to be seen.

W. R. Pickup, Ltd., S.298.

The "Stonite" sanitary fireclay ware is exhibited on this stand on behalf of the company, and "Stonite" one-piece fireplaces on behalf of their associated company, the Stonite Co., Ltd. A wide range of modern designs in sanitary ware is on show, suitable for public and private installation. A new feature is the "Stonite" one-piece fireplace, a ceramic product possessing great strength and heat-resisting properties, and obtainable in different colours.

Pilkington Bros., Ltd., S.302.

This stand offers a comprehensive display of structural glass assembled in a stand architecturally designed to illustrate the possible use of the more recently produced glasses, with special treatment given to the decorative use of "Vitrolite," a modern, coloured wall-lining material. Numerous designs in this hygienic product are shown, and practical demonstration is given to those interested in fixing wall linings with a special "Gripon" mastic. Clear, silvered and decorative glasses are on view to show the wide range of processes available and demonstrate the possibilities of treating glass surfaces to meet the most exacting requirements of any modern scheme. "Armourplate" glass, "Vita"-glass, cathedral glass (both white and tinted), rolled and wired glasses are also displayed.

Pinchin, Johnson and Co., Ltd., F.112.

On this stand a great variety of modern and distinctive finishes for the building and decorating trade are displayed, and many of the materials are exclusive to this firm. Among the many materials shown on the walls and panels are examples of results obtainable with "Figaro" hard enamel gloss paint, "Hygeia" flat wall finish, "Veritone" scumble, stain and glaze, "Minerva" synthetic enamels, "Cementilk," etc. Of special interest to decorators are the practical examples of the firm's "Vigorised" spray process, which enables painting operations to be executed in a much shorter time than is possible by normal methods. Five or more coats may be applied wet-on-wet; after the first coat has been applied, each succeeding coat may be sprayed on only 30 minutes to one hour after its predecessor. The surface to be painted may be primed, may receive a filler and a colour coat, and then two coats of varnish—five applications—all in the course of one working day.

Thomas Potterton (Heating Engineers), Ltd., B.19, 20 and 21.

Hot water supply and central heating for all household and industrial purposes are the subjects treated of in this display. Working examples of automatic gas-fired "Thermal-Storage" water heaters, "Empire" and "Emperor" boilers, "Emperor" thermal-storage sets and multiple "Empire" sets for bulk supply operated automatically by bi-metal thermostats are shown, and demonstrations are given of bi-metal thermostats and other forms of automatic control. Other plant displayed includes the "Victor" and "Rex" gas-fired central heating boilers operating low-pressure hot-water radiators automatically controlled; coke boilers for central heating; radiators, towel-dryers and accessories.

Rawlplug Co., Ltd., B.11.

This firm have had fitted on their stand a range of examples of typical "Rawlplug" jobs that are constantly encountered throughout the building trades. Demonstrations of "Rawlplugs," the "Rawlplug" mechanical hammer and "Rawlplug" bolt anchors are carried out daily during the period of the Exhibition. An entirely new product is shown under the name of the "Rawlbolt." This is a special type of expansion bolt, particularly suited to the needs of the building trade, and is expected to create considerable interest. Another "Rawlplug" product of considerable interest is the new "All Square" design of chromium fittings. Other "Rawlplug" specialities shown include "Durofix," the heat and waterproof adhesive; "Plastic Wood," for making good all defects in woodwork; an electric soldering iron; and "Aluminium Enamel," extensively used as a general preventive of rust on exterior and interior fitments.

Redalon, Ltd., A.146.

Full details are to be found on this stand of "Redalon" liquid and "Bull Dog" floor clips, the two products marketed by Redalon, Ltd. "Redalon" liquid is generally acknowledged as the perfect cement retarder and is used as such wherever an efficient key is required for bonding plaster or cement renderings, terrazzo or tiles, to poured concrete. It is also used to obtain a perfect joint between sections of poured concrete where day joints have to be made. Slabs of "Redalon"-treated concrete, demonstrating the efficiency of the "Redalon" bond, are shown on this stand. An exhibit of particular interest is one demonstrating the superiority of the "Redalon"-treated surface to a well-hacked surface. "Bull Dog" clips of types designed for anchoring wood joists to floors, ceilings, Mansard roofs, walls and the underside of ceilings are given a special display. The clip usually supplied is the 2 in. regular clip with a sherardised finish—the finish which lengthy experiments have proven to be most suitable. Special sizes and types of "Bull Dog" floor clips to suit all purposes can be manufactured at this firm's Birmingham factory. The exhibit is in practical form.

Redhill Tile Co., Ltd., F.121.

This stand is in the form of a cream-plastered building with a green-tiled roof, the advanced wing walls on either side forming small courts, the interior walls of which are divided into panels containing exhibits of tiles. On one side the display is composed of "Redhill" interlocking tiles in various standard colours, whilst on the other side are examples of plain 10½ in. by 6½ in. tiles, both machine-made and double-cambered. The standard colours are sand-faced, light red, dark red, mottled, straw and Cotswold stone; other colours, textures and finishes can be supplied to customers' requirements. In designing this stand the architects, Messrs. Unsworth, Goulder and Bostock, have sought to depart from the restricting influences of the past and to achieve a simple and dignified spaciousness according with the modern movement in design.

Rippers, Ltd., D.57.

A Tudor entrance hall and staircase in English oak constitutes the chief exhibit and illustrates how the best modern practice in manufacture may be successfully allied with some of the finest features of period design. The special treatment used for the exterior accentuates the vigorous texture of English oak, while the interior, which is panelled out in Austrian oak, also exploits the decorative possibilities of this method. Upstairs are examples of panelling and doors in Western red cedar, and there also are on view two patented specialities—"Hygienic" flush doors and "Miracle" sectional partition. This stand should be of interest to all architects and builders.

Ronuk, Ltd., F.116.

The oak stand of this company is a practical example of the work of their polishing contract department, which, during the past 40 years, has been responsible for the preparation of the polished flooring in many hundreds of the great public buildings. Lately an increasing amount of work has been done in private houses of all types. The floor of this stand is of ordinary pine converted into the best possible substitute for hardwood by the company's improved methods. The stain used—"Colron" wood dye—is on view in each of its twelve different shades. It is claimed to be quick and easy to use, and, being deeply penetrating, its preservative effect is claimed to be permanent.

The Ruberoid Co., Ltd., P.267.

"Ruberoid" roofing, which has been used successfully for buildings for forty years, is the major attraction on this stand. Apart from the smooth grey or red finish, this roofing is now supplied in red or green with a surface of natural crushed slate. The special exhibit of "Ruberoid" strip slates is another piece of evidence of roofing progress. Another interesting development is "Ruberoid" twin butt slates. These are made of slate surfaced material in either tile red or Westmorland slate green, and in two finishes named "Standard" and "Rustic." When assembled on a roof, the combination of colours is particularly suited to stucco or stone houses with dark tones, or to wood-finish houses with green trim. Among the many other exhibits to be seen on this stand we noted the special display of "Ruberoid" and "Pluvex" dampcourses. These are made with a bitumen base in various weights and widths, and to meet every dampcourse requirement without being affected by pressure or temperature. Both are being very widely used on leading housing schemes throughout the country. Other exhibits include "Zylex" slaters' felt, "Pluvex" roofing felt, insulating papers, preservative paints, "Astos" asbestos roofing, etc.

Scaffolding (Great Britain), Ltd., E.108.

Uatent steel tubular scaffolding—an entirely British product comprising solid drawn tube of specially high-tensile strength (supplied either galvanised or painted), together with couplers, bases and putlogs—is shown in practical form on this stand. A variety of constructions is displayed, together with a complete range of fittings available for use with tubular scaffolding. An interesting feature is the worm spigot for joining two tubes end to end without the use of a coupler. Of no little interest is a steel gantry, which is adjustable in width from 4 ft. to 14 ft., and in height from 10 ft. to 16 ft., and is capable of a load of 2½ cwt. to the foot super. under normal conditions, thus forming a modern and economical form of gantry construction. Suspended scaffolding, intended primarily for use on steel-framed buildings, and general building plant of every description, are displayed. Attention is specially drawn to the patent adjustable splithead and the patent "Tubeshor" marketed solely by this company.

Sevenoaks Brickworks, Ltd., H.163.

One end wall of the well-built pavilion which forms this stand is built in Sevenoaks "Stonetone" facings, and the other in hand-made kiln-burnt "Cherry Blues," with a fireplace in brickettes. The stand is roofed with hand-made sand-faced multi-coloured tiles. A dwarf wall is on one side, forming a counter. This is built of "Whitetone" facings. Kiln-burnt reds, wirecut stocks, stocks, and common bricks made by this company are also shown.

Silicate Paint Co., E.105.

This display is a stand designed upon simple modern lines to show some of the more popular tints of "Duresco." This article is an oil-bound washable water paint, and was originally designed as a decorative finish for new plaster walls, but is recommended for old plaster walls, brickwork, cement, asbestos sheets, stucco, roughcast, timber beams, matchboarding and wall boards of all kinds. The "Duresco" competition panels are shown

on the stand. These panels provide interesting examples of the possibilities of the paint for pencil work and ornate decoration. The company are manufacturers of every kind of decorative materials for use in the painting trades.

H. C. Slingsby, C.53.

The exhibits on this stand consist of a large variety of "Slingsby" trucks, ladders, barrows and castors. These articles, which are well known to architects and builders, include the sliding-wheel patent trucks, various types of platform trucks, sliding-wheel patent jacktrucks, stackers (hand-power and electric), the patent Rolla-Rocka lift trucks, the "Collron" patent sacktrucks, and handcarts of every description. There is a varied show of castors and wheels, together with wheelbarrows, steel-back patent extension ladders and steelheld step-ladders, and other types of ladders. Every contractor should make a point of inspecting this "Slingsby" plant.

Samuel Smith and Sons, Ltd., L.224.

One or two new models of the "Foresight" patent grates are displayed that show an advance in design and construction over previous models of this same series of grates. The No. 9, both tiled and in vitreous panelled, has well-devised hob space, increased plate rack space, sliding door to form hot closet, and the general construction has been improved. The other models are Nos. 7D, 4D, "Solo-Oven," "Mity-Oven," and "Excel-cook," and stoves are being displayed both in ordinary and vitreous enamel finishes. These grates constitute an improvement in kitchen heating.

Standard Range and Foundry Co., Ltd., L.219.

Exhibited on this stand is a varied selection of fireplaces, modern in design, reasonable in price, and in a variety of attractive combinations of colour. A special feature is the new faience fireplace with a high-fired "Felspathic" glaze, giving a remarkably attractive finish. These fireplaces are shown fitted with electric, gas and coal fires, many being made in one piece, which thereby simplifies erection. Also exhibited are the combination coal-electric fireplaces showing electric panels and coal fires combined in one fireplace.

The Steel Scaffolding Co., Ltd., B.8.

The exhibits of this company include many of their well-known specialities, such as the "Bettaskaf," the "Big Ben" scaffolding, a system of turning ordinary plain-ended steam tubing into steel scaffolding by the simple use of all-one-piece drop forgings. The following exhibits are also on view: the double coupler, which was used on "Big Ben"; the swivel coupler, another all-one-piece drop forging, enabling two tubes to be joined at any angle in the same plane; the putlog coupler, available with any form of tubular scaffolding, and halving, it is claimed, the cost of the whole erection; the split joint pin, a cheap and swift method of joining two tubes in the same straight line; and the putlog head, for all users of wooden scaffolding, enabling them to build without leaving out the brick for the insertion of the putlog. Wooden pole scaffolders lash the putlog to the wooden ledger; steel scaffolders couple it in the ordinary way. The other exhibits are rubber-tyred castors, for all types of movable scaffolding; the guard board clip, for joining wood and steel in staging and decking; and the split-shore.

A 'bus has been chartered by the company. It will leave the Exhibition at 11.30 a.m. and 3 p.m. each day for the purpose of conveying, without charge, such visitors as wish to inspect the "Bettaskaf" steel scaffolding which has been erected around "Big Ben" Clock Tower, Houses of Parliament. The 'bus may also be chartered, without charge, by any party visiting Olympia, who, by arrangement, will be picked up at any main line station or meeting place in the Metropolis.

Stephens and Carter, Ltd., O.258.

An extensive exhibition of builders' ladders, barrows, steps, trestles, trucks, extension ladders, steel scaffolding, scaffold cords, drain rods, rubbish screens, handcarts, and many other articles useful to the building and decorating trades, such as hoisting tackle, blocks, etc., are on exhibit on this stand. The patent wire-wove rubbish basket (the handles of which cannot break away, nor the bottom fall out) produced by the company is claimed to outlast six ordinary baskets and should be of interest to builders. A further exhibit is a full-sized travelling cradle shown working on continuous track. This travelling cradle is claimed to be simple and safe, and the track is so constructed that the cradle will travel over any length on the straight, round or curve, or negotiate a frontage, however irregular it may be.

Stic B Paint Sales, Ltd., J.179.

"Stic B" stone covering shown here is made in 12 standard colours. It is matchable to any colour, resembles stone when stippled, is claimed to be permanent, waterproof, quick drying, odourless, and non-poisonous, and to resist fire, acids, sea air, spray and fumes, will not saponify, and possesses wide range of application. The flat paints made by this company are obtainable in any colour, and provide a permanent waterproof decorative medium with an attractive luminous colour. They possess in a degree the same qualities as "Stic B" stone covering. For an intermediate between the stone covering and the flat paints, the semi-stone mixtures are obtainable. The plastic paints are made in the same colours as the flat paints, and can be mixed directly to the desired colour, thus eliminating a fixing coat of paint where a two-colour effect is desired. The washable distemper and "Stic B" transparent damp-proofer are also on show.

THE STEEL SCAFFOLDING BUS.

Stothert and Pitt, Ltd., R.293.

The equipment of the concrete batching plant, a feature of this stand, is designed to work in conjunction with a concrete mixer of 7 or 10 cu. ft. mixed batch capacity, and is complete with sand and aggregate bins and weigh batchers. Another example of concrete plant is the super seven "Victoria" mixer, which is of the closed-drum type, and has a rated output of 10½/7 cu. ft., but will give a mixed batch up to 9 cu. ft. dependent on the shrinkage of the aggregate used. The machine is equipped with a power operated sideloader. Another piece of plant of the same range is the super 28 "Victoria" mixer, which has a capacity of 42/28 cu. ft. (at a nominal rate, 30 batches per hour). Other exhibits of this firm are the 3½ tilting mixer machine; the hot mixer, of particular interest to those engaged in road maintenance who wish to make tarmacadam in small quantities either on site or at a depot; the jigging vibratory screen, and the sand and gravel washer and screen.

Tentest Fibre Board Co., Ltd., G.141 and 133.

This exhibit comprises examples of concrete wall, floor, roof and partition construction, showing the application of the firm's product as a sound and thermal insulating material. The stand shows the application of "Tentest" to different forms of construction. A second exhibit of the company on Stand 133, Row G, Canadian Section, shows the decoration of walls, with particular reference to special methods of joint treatment. In the gallery a special exhibit, known as "The 1935 Flats Modern Interior Architecture," is built entirely of the material, the walls and ceilings showing decorative possibilities and special treatment of joints.

Thames Board Mills, Ltd., G.147.

This stand has been designed to illustrate the usefulness of "Essex" board for all kinds of jobs. Being constructed of the material itself, it affords an actual demonstration of its possibilities. "Essex" board has many applications for walls, ceilings and partitions. For jobs such as making houses into flats; turning attics and basements into workrooms or storage rooms; partitioning in shops; dividing offices; turning factory space into canteens or rest rooms; replacing cracked and broken ceilings: for such jobs "Essex" board is excellent, being very strong, rigid, and unaffected by vibration. The fact is emphasised that it requires only one coat of water paint or distemper to give effective results.

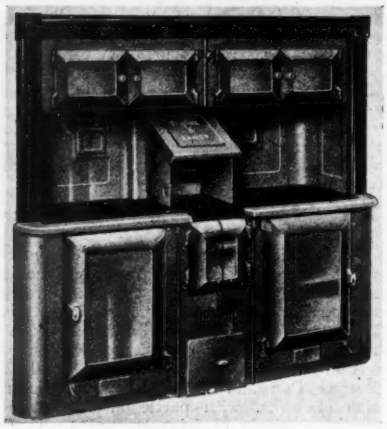
Trussed Concrete Steel Co., Ltd., F.130 and 131.

On these stands are exhibited full-sized examples of the "Truscon" pre-cast reinforced concrete floor, including various adaptations to suit differing types of floor finish, also varying types of ceiling construction. They show the economic accommodation of pipe conduiting in a form eminently suited to modern domestic and business buildings. At the same time they demonstrate the advantages of the suspended ceiling in overcoming the transmission of sound through the floor. An interesting feature in ceiling construction utilising "Hy-Rib" "Key-mesh" reinforcement is shown over the whole area of the stand ceiling. The "Hy-Rib" is fixed to steel supporting members, but without the plastering. Other exhibits include various types of concrete slabs, in which "Hy-Rib" provides the centering as well as the reinforcement. The remarkable progress made in the technique of finished concrete surfaces is fully exemplified, not only in the actual sample slabs displayed here, but also in the two octagonal polished concrete columns at the stand entrance. The finishes to the slabs show polished surfaces as well as exposed faces to the aggregates. Also exhibited are the "Solcheck" roofing tiles, a "Truscon"

product designed to protect buildings with flat asphalted roofs from structural defects caused by the heat of the sun.

Triplex Foundry, Ltd., B.13 and L.221.

On Stand B.13 the company show the new permanent porcelain enamelled finish of their grates, which, it is claimed, will not burn off with the intense heat of the fire. Porcelain enamel will not chip and is easily cleaned. The "S" model "Triplex" combination grate is demonstrated, this being a popular one for a medium-sized family, and the domestic hot-water supply is on the indirect system. An entirely new model "Triplex" is exhibited for the first time—a "K" pat-



"K" PATTERN "TRIPLEX" GRATE.

tern flat-topped range, which has been specially designed for boarding-houses, small hotels and similar establishments. On Stand L.221 the "Greybridge" range is shown at work. This cooking grate is particularly suitable for dwellings erected to rehouse people displaced by slum clearance schemes. Another model shown for the first time is the No. 5 "Tweenie" grate, having a larger oven than that of existing sizes.

Tuke and Bell, Ltd., D.65.

The principal exhibit here is distributing apparatus for a sewage purification scheme suitable for dealing with the drainage from a house with, say, four to six people. This consists of a double-acting tipper with brass bushed bearings, and rubber buffers, fixed in and including coated cast-iron container with chute outlets and serrated edged distributing channels. These distributors are made in sizes ranging from 8 ft. by 2 ft. 6 in. to 9 ft. by 4 ft. with single-acting tippers and containers, and from 9 ft. 3 in. by 4 ft. to 17 ft. 3 in. by 7 ft. with double-acting tippers and containers. Ferro-concrete reinforced coverslabs in sections for easy removal with rebated joints and cast-iron lifting rings, for covering filter beds or semi-septic tanks; an "Ideal" revolving distributor; a single-acting pump for raising sludge; grease traps; rainwater separators; a pneumatic ejector for lifting sewage, etc., are other displayed plant.

Turner's Asbestos Cement Co. (Branch of Turner and Newall, Ltd.), G.143.

A special feature of this exhibit is a practical display of the new "Turnall" building slab, the size of which is 6 ft. long by 2 ft. 6 in. wide, with a thickness of 2 in. Details of the tests which these building slabs have withstood are exhibited Another new exhibit since the last Building Exhibition—"Turnall" asbestos reinforced aluminium foil—has been produced to meet the increasing need for an efficient low-priced heat-insulating material for use in building construction, which shall be at once light in weight, convenient to handle and apply, and durable in performance. The well-known "Turnall" Trafford tile is also now manufactured with a metal reinforcement, and this product, together with the T.A.C. system of reinforced asbestos-cement corrugated roofs by using the "Poilite" metal reinforced asbestos-cement sheeting, is exhibited in conjunction with a replica of the test structure used for the testing of these products. The decorative side of the industry is represented by a wide range of glazed products, applied in a practical manner, and the moulding department by such items as large hoods, canopies, safety ducts, ventilating ducts, rainwater goods, pressure pipes for water and gas mains, soil pipes, etc.

"Twisteel" Reinforcement, Ltd., C.37.

"Twisteel" high-tensile steel square mesh reinforcement for use in road slabs, ground floors, "square slabs," etc., is to be seen on this stand, together with the "Twisteel" high-tensile steel longitudinal mesh, which is used in suspended floors, stairs, etc. Samples of "Twisteel" double-layer reinforcement as supplied for Middlesex county roads, numerous photographs of buildings and roads reinforced with "Twisteel" reinforcement, and a model of a reinforced-concrete structure showing application of "Twisteel" mesh, are other interesting exhibits.

The Universal Asbestos Manufacturing Co., Ltd., S.299.

This firm's activities are confined to the manufacture of all classes of asbestos cement goods. The chief exhibit is their new reinforced asbestos cement troughing, which is used in connection with flat roofing and fixed direct to steel purlins, and obviates the use of timber. It is claimed that by using this material, which is fireproof, the roof is insulated and considerable saving is effected, not only in the cost of the material itself, but in the superstructure. The roof of the stand is covered with russet brown and green pantiles; the sides are covered with the firm's various corrugated products, including their "Twin Twelve" and "Watford Handcraft" tiles. The inside of the office is lined throughout with asbestos cement flat sheets and illustrates an interesting method of jointing.

Venesta, Ltd., F.114 and 62 Bays.

The former stand is designed to show at a glance the qualities of plywood—lightness and flexibility combined with great strength; and at the same time to provide as full a display as possible of the various types and finishes of plywood and "Plymax," the metal-faced plywood. In one display the six standard grades of plywood are shown, while there is an exhibition of four plywood-faced doors, showing eight different surfaces, and two "Plymax"-faced doors. Venesta standard bent plywood seats are also displayed, while the floor is laid with plywood flooring, part in birch and part in walnut. There is a special display to remind visitors of the services of the Building Uses Department, which supplies information and advice to the architect, the builder and the timber merchant, and co-ordinates their activities. In the Gallery exhibit are shown the prize-winning designs in the Venesta Competition, recently decided. The main stand has been erected from the design of Mr. A. F. Skinner ("Tecton"), whose scheme was placed first.

Vulcanite, Ltd., E.107.

A special show is here made of a new light-weight coloured concrete tile finish to "Vulcanite" flat roofing which, as our readers know, is a built-up roof covering laid on wood or concrete, patented by the firm 35 years ago. In addition to the well-known brands of "Rexilite," "Ark," and "Pyramid" pure bitumen roofing felts, the firm are exhibiting new bitumen roofing felts called "Globe" and "Apex," finished with a mineral surface on one side in pleasing colours, the "Globe" in green or red and the "Apex" a silver-grey. Also on view are pure bitumen dampcourses in various weights on fibre and hessian base, also lead and bitumen.

Williams and Williams, Ltd., O.255.

This stand is designed and constructed to show several examples of "Reliance" metal windows actually built in to openings. The exhibit includes several types of windows and doors constituted in "Reliance" universal sections, applicable to public buildings, offices, hospitals, schools and residences. Examples of the standard windows now used so extensively in modern villas and on housing estates are contained in an attractive seven-light bay built in to the walls of the stand, and on the opposite side of the stand is a recently introduced type—styled the "Clereview" window—the principal feature of which is the hinged folding and sliding leaves, affording a clear and uninterrupted view when open.

Winget, Ltd., S.301.

A specially interesting exhibition on this stand is the "Pumpcret" concrete pump, a highly developed and economical machine for the placing of concrete. It eliminates the use of auxiliary placing plant such as barrows, lorries, chuting towers, cable cranes, etc., and places concrete in position by pipe line. The stand is planned to show the relation of the concrete pump to the mixer, so that the whole process of mixing and placing can be visualised. Other new equipment is the "Winget" "Speed Prime Pump" for contractors' and general use, made in 2-in., 3-in. and 4-in. sizes, and shown as a portable engine-driven unit. Models of "Winget" open drum mixers represent the complete range. Two "O" type "Winget" mixers with tubular steel frame and two wheeled chassis are on view. They are of special interest in that one of them was delivered direct to Olympia from a building site near London, where it has been in continuous operation for the last 2½ years. "Winget" roller pan mixers are represented by a 4-ft. 6-in. model mounted on four wheels and fitted with a 5-h.p. engine. It is capable of supplying up to 40 bricklayers with mortar. One section of the stand is set apart for the demonstration of the firm's brick, block and slab machines. A tile machine and sample concrete tiles made with "Winget" plant are also on view, together with other interesting exhibits.

The Yorkshire Brick Co., Ltd., F.117.

This company and its associated companies, the Metropolitan Brick Co., Ltd., and the Staffordshire Brick Co., Ltd., are exhibiting hand-made sandstock facings in pink, red, multi, purple, greys and black; machine-made sandstock facings; hand-made London stock facings; machine-made rustic facings in various colours; pressed facings in brindled, plum, red and grey; blue, brindled and red engineering bricks of "Stairfoot," "Dinnington" and "Wallgrange" brands; paving bricks; partition blocks; perforated insulating common bricks; hand-made roofing tiles in special colours, and garden ornaments. In short, bricks for all purposes are to be seen.

"Treetex" (Mo and Domsjo Trading Co., Ltd.), P.269.

Modern in conception and design, this stand shows the varied possibilities of "Treetex" as a building and decorative material. The central feature, a flood-lit tower over 30 ft. in height, is completely covered with "Treetex" nailed on stout studding. The vanes extending over this tower are built of 2 in. by 2 in. studding covered with 20 ft. lengths of "Treetex." This modern board has been used throughout. Arranged about the sides of the curved office is a complete picture of many types of buildings insulated with "Treetex," not only in this country but other parts of the world. Samples of other decorative materials are on view.

A. Vigers, Sons and Co., Ltd., Gal.15.

Specimens of parquet flooring in various designs, all types of block floorings, strip floorings and panelling form the exhibit of this firm, and should be of interest to all concerned. Some beautiful examples of timbers, especially of Empire timbers, are shown.

INQUIRY BUREAU

We are glad to give questions and answers, but cannot accept responsibility for contributed replies, especially on legal matters.

We do not undertake to reply to inquiries concerning proprietary materials.—ED.

QUESTIONS.

Cracks in Bungalow Built on Clay.

SIR,—I should be obliged if you would advise me concerning a bungalow built on clay; it has been built about eleven years. During the last year or two cracks have started to appear, and in the last few months they have become rather extensive. There are also some cracks in the walls, in corners and under windows. I understand that the exceptionally dry weather we have experienced has caused movement of the subsoil. If I have the cracks filled in and generally made good, is it likely to last, now that the place has generally settled, or will there be constant movement with the varied climatic conditions, and so constant cracking of ceilings, etc.? If so, what is the best method to overcome this trouble? I am rather concerned about the tenant living in the bungalow. Is there any danger attached to a general settlement? J. C.

[This trouble, which has been dealt with in our columns recently, is one of common occurrence during long spells of dry weather. It is impossible to give our correspondent any definite advice without seeing the building, and he would be well advised to call in a competent builder. It may be said, however, that settlements of this nature are often more unsightly than dangerous. The cracks may be merely superficial, involving, however, extensive decorations, etc. On the other hand, they may be serious, and no risk should be taken. The filling in of cracks with cement very solidly grouted in is not advisable, since, with the coming of wet weather, reverse cracks may appear by force of leverage. Underpinning to a depth of 4 ft. is the only safe way of preventing movements from this cause, and care must be taken that all parts subject to differences in weather conditions are equally well founded.—ED.]

ANSWERS.

Building Society Survey: Alleged Negligence.

[ANSWERS TO "R. S.," SEPTEMBER 7.]

SIR,—Your correspondent "R. S." may be interested to learn that the question of the use of the expression "survey fee," as applied by building societies for the purpose of arriving at a valuation for mortgage purposes, was taken up by this Faculty over a year ago with the National Association of Building Societies. It was pointed out that to the great majority of prospective house purchasers the payment of a "survey fee" implies that the house has been subjected to a comprehensive survey by a surveyor, which in many instances is not so; and, in fact, in the case of blocks of houses of similar design and specification, it may frequently involve an inspection for valuation of only one house in the block. We urged that to avoid any misconception on the part of the purchaser, the expression "*Inspection* fee" should be used by building societies, except in such cases in which a comprehensive survey had been made. We were subsequently informed that the National Association of Building Societies had impressed upon the various societies that they should avoid the use of such expressions, which were liable to misconception.

The building society's surveyor is, of course, primarily responsible to the society for the accuracy of any report he may make, although the purchaser is mulcted in the fee under the impression that he is paying it for his own protection. Such experiences as that of your correspondent emphasise the necessity for some definite pronouncement on the part of the building societies as to their liability to the purchaser in the event of negligent or inaccurate surveys.

H. B. WHITFIELD, General Secretary,
Faculty of Architects and Surveyors.

SIR,—Your correspondent has not quite understood the situation. The surveyor to the society is not his adviser, but that of the society. It is his job to advise the society that it is taking no undue risk in advancing a certain sum of money upon the security of the property inspected. If the surveyor is negligent in his inspection, and a foreclosure occurs, leaving the society with the property, which will not sell at the value of the outstanding mortgage, a claim for negligence may lie against the surveyor in favour of the building society, but in no case can there be any claim against him on the part of your correspondent unless he has been separately and privately engaged by him at an additional fee as his adviser. Even in the latter case, actual negligence must be proved—namely, that defects were overlooked which would have been obvious to a competent surveyor.

SURVEYOR.

SIR,—If the inquirer can show there is anything in the nature of a contract between him and the building society, he may have a remedy against the society in respect to the negligence of their surveyor, and because of what appear to be latent rather than patent defects. If there is no contract, then his remedy is against the vendor of the property. The matter is fraught with difficulty, and legal advice should be first obtained.

LEX.

SIR,—A building society survey is carried out at the instigation of the building society after the receipt by them of an application for an advance or mortgage from their funds, for which they are offered the deeds of a house or other property as security for the required loan. The "survey" is made by the building society's surveyor with the sole object of satisfying his society that the property will form a safe and proper security for the amount applied for by the borrower. The so-called survey is, therefore, really a valuation of the property for investment purposes, and is not in any sense a survey for the purpose of ascertaining the structural condition of the building. Such things as drains and other hidden parts of the structure are, probably, never looked at by the society's surveyor, nor would he concern himself with cracks in the walls that are not immediately apparent to the eye during what is usually a very casual inspection of the structure. I contend that the term "survey" is erroneously applied by building societies to these inspections by their surveyors, and, as it frequently leads to misconception and disappointment for the borrower, the use of the term in this sense should be prohibited by law.

I am afraid "R. S." has no claim whatever against the building society, even though he may have paid it a fee for the misnamed "survey." An intending house purchaser should always employ an independent surveyor to survey the premises on his behalf, and report to him on their structural and sanitary condition. The intending purchaser's surveyor will then be acting entirely in his client's interest, and will approach the matter from a point of view entirely different from that of the building society's surveyor.

W. PHILIP REYNOLDS.

Foundation Stone Laying.

[ANSWER TO "GENERAL FOREMAN," SEPTEMBER 7.]

SIR,—Your correspondent's job is, first, to put on his best suit for the occasion; secondly, to see that the tackle for hoisting and lowering the stone is in working order, and that the stone will fall naturally into place; thirdly, that mortar on a clean board sufficient to bed the stone is available; and finally, to direct the layer of the stone as to where to put the mortar, and most probably finish the job for him. Most important of all, it is necessary for him to be quietly efficient without any fuss.—ARCHITECT.

ILLUSTRATIONS.

(*Continued from page 446.*)

Rust's Vitreous Mosaic and Tile Co., mosaic flooring; Rapid Floor Co., Ltd., pre-cast concrete floors; F. A. Norris and Co., lantern lights; Bulman Jupiter Screen Co., rear projection screen; Sound and Cinema Equipment, Ltd., "talkie" apparatus; the Kershaw Projector Co., projector equipment; W. Lusty and Sons, Ltd., seating; "Maurice," curtains.

The Berrylands Hotel, Surbiton.

The public accommodation of this house may be studied from the plan reproduced. The first floor provides domestic quarters for the licensee. The exterior is of multi-coloured sand-faced T.L.B. bricks, with a wide-gauge mortar joint and stone dressings.

The general contractors were Messrs. Ides, Ltd., of Kingston-on-Thames, and the sub-contractors were as follows: Thomas Lawrence, of Bracknell, facing bricks; The Horsecombe Stone Quarries, stone dressings; Archibald Dawnay, Ltd., steelwork; O'Brien Thomas and Co., Ltd., sanitary fittings; The Abbey Heating Co., heating and hot water installations; Bower Engineering Works, Ltd., electrical installation; Hammond Bros., and Champness, Ltd., No. 2 hand power lifts; W. H. Heath, Ltd., counters, cabinets and pewtering; Yannedis and Co., ironmongery and ceramic enamelled letters; Comyn Ching and Co., Ltd., external lantern; James Walker, Ltd., decorative treatment to saloon lounge; The Crittall Manufacturing Co., Ltd., metal windows. Mr. Joseph Hill, F.R.I.B.A., is the architect.

The "White Hart," Farncombe, Surrey.

In this small country house the public rooms adjoin a central service counter, which also communicates directly with the living quarters and the off-licence department. For the exterior, multi-coloured red and grey sand-faced T.L.B. bricks have been used, with a wide-gauged mortar joint.

The general contractor was Mr. G. A. Reeve, of East Dulwich, and the sub-contractors were as follows: Thomas Lawrence, of Bracknell, multi-coloured sand-faced bricks; S. F. Mitchell, Littleton Brickworks, grey sand-faced bricks; Roberts Adlard, roofing tiles, tiles supplied bq Tilehurst Pottery Co.; O'Brien Thomas and Co., Ltd., sanitary fittings; Abbey Heating Co., electrical installation and hot water installation; Yannedis and Co., ironmongery and metal letters; Gaskell and Chambers, Ltd., counters, pewtering and cabinets; Crittall Manufacturing Co., Ltd., metal windows; Hammond Bros. and Champness, hand power lift. Mr. Joseph Hill, F.R.I.B.A., is the architect.

The "Duke's Head," Tadworth, Surrey.

This is an old building, the front wall of which was taken down and replaced, and a new front built with mixed Redhill and Dorking multi-coloured sand-faced bricks. The old Welsh slates were removed from the roof and replaced with Cornish grey rustics, laid in random widths. An off-sales office was added, and a wide entrance provided for access to the tea garden and old saloon bar at the rear. The building was erected for the Reigate Brewery Co., Ltd., by Messrs. F. Smith and Sons, of Tadworth, and the architects were Messrs. Williams, Pettett and Gardner, L. and F.R.I.B.A., of Epsom.

"Bones Gate," Chessington, Surrey.

This has been designed to replace an old beer-house which has been in existence for some three hundred years. The new building occupies an adjoining elevated site some 7 ft. above the level of the public road. This difficulty has been met by placing the building, with its spacious terrace on the high level, the cellar being level with the roadway. The lower part of the elevations is faced with Keymer sand-faced bricks, and the upper part is framed in oak half timber work filled in with plaster. All external joinery is in Austrian oak. The building was erected for the Reigate Brewery Co., Ltd., by Messrs. Burnard and Pickett, of Wallington, and the architects were Messrs. Williams, Pettett and Gardner, L. and F.R.I.B.A., of Epsom.

THE BUILDING TRADE

MORE ESSAYS ON BUILDING SUBJECTS—XI.

By J. R. TAYLOR.

DETAILING FOR ECONOMY.—IV.

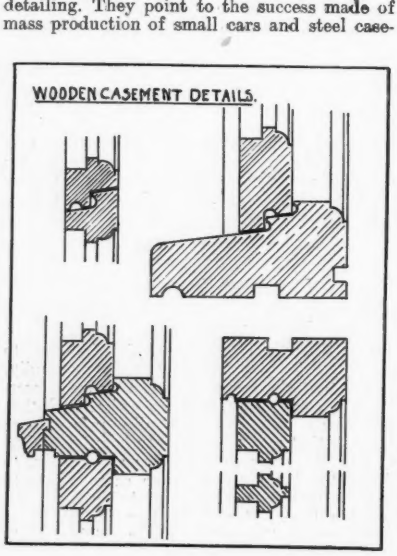
Casement and Sash Windows, etc.

THE diagram of wooden casement windows reproduced will be familiar to most readers who have carried out work to architects' details. What is not, perhaps, quite so well known is that, faced by the keen competition of the manufacturers of standard metal casements, various joinery works are now supplying high-class windows at prices little above those prevailing before 1914. It is only possible to do this if many thousands of feet of any of the members are run through at one setting of the machines. As regards finish, the average quality of machined mouldings produced by British manufacturers has greatly improved, and it is now possible to purchase ready-made doors, windows and other joinery suitable for quite good class work at very moderate prices. But even in quite cheap work it pays to use cleanly stuck mouldings, for when they are ragged or woolly the painter has often to spend as much time glass-papering and stopping them as to bring the cost above that which would have served to produce those of the highest class. A very experienced architect once told the writer that he could always judge a builder by the quality of his joinery when it was made up in the builder's own shop. If the joinery were good, he felt sure that the work in other trades would also be good. To a lesser extent he might now be judged by the quality of joinery he purchases.

The respective merits of the casement and sliding sash windows have been often debated. In the end the question resolves itself into a matter of individual taste, for each type has its merits and demerits. For a small house, cheaply built, the writer has a slight preference for the sash window under exposed conditions, because, with the wide weather bead (shown last week) it can be left slightly open to admit air without also admitting rain. Even the fall-back hopper casement with side checks does not accomplish this quite so well, and certainly not so cheaply. On the other hand, sliding sashes almost invariably rattle if left partly open, and there are few forms of minor noise that are more annoying. This can nearly always be traced to the methods employed when frames are built in and sashes are refitted as a preliminary to hanging. Owing to moisture having reached the insides of the boxings, the pulley-styles and linings become slightly swollen, with the result that the sashes have to be eased before they will fit, and the edges cannot well be painted and the hanging at once proceed without leaving time for the paint to dry and harden. More often than not these edges are left unpainted, with the result that the sash styles become swollen and a second easing necessary. When sash cords break it is usually time to renew all four of them, even if only one be broken. But when both cord and pulley are of good quality at the outset they last much longer than is sometimes supposed. In the case of four small houses built in 1905, not one of the windows has yet required to be fitted with a new cord. Good quality pulleys were fitted at the outset, and the eyelet holes in the cast-iron weights were carefully smoothed out with a worn file. Where windows give repeated trouble owing to broken cords it is often the pulleys that are at fault and require renewal. For large sashes glazed with plate glass, and consequently balanced by heavy weights, there is nothing that will give less trouble than chains, though some of the best quality sash-balances are satisfactory in use. The position to be occupied by windows relative to the thickness of the wall is generally regarded as being more or less a matter of taste. It should, however, influence the detailing. Casement windows can be set sufficiently far forward to master external renderings of stucco or rough-cast and be grooved to receive the edges; but unless the window is very securely fixed the joint is liable to be broken, with the result that moisture penetrates to the back of the frame. When they are so set forward the cost of a stone or other sill may be saved, but to some extent this is offset by the increased width of window bottom and linings or other internal finishings. The wooden sills should have ample projection and preferably be of teak, which under moist conditions will, it is believed, outlast oak. A cement bell or hood mould will protect the head, and some architects introduce two courses of slates into this with very good results. A simple alternative is to put over the head of the frame three or more rows of hard-burnt machine-made roofing tiles, bedded in cement and laid to break joint. If the tiles are fixed with the nibs outwards, each row may oversail, with not unpleasing effect. Tiles may be procured that have three fixing nibs instead of the more usual two. Behind rough-cast a concrete lintol may be placed over the tiles to relieve them of load. Much more could be written about the various ways in which windows can be fitted into openings, but what it all comes to is that the first object to be aimed at is the exclusion of moisture. In the writer's opinion this is most readily attained, where walls are to be rendered externally, by using casement windows, and keeping the frames forward; and when sash windows are used, putting them into openings having reveals. All hidden parts, such as tongues, grooves, mortices and tenons and the inside of boxings, should be painted during assembly, and all other parts receive a coat of paint additional to the priming before the windows are fixed.

Standard Detailing.

Before going on with this part of the subject, something may be said appropriately about housing. In certain quarters it is hinted that the average architect and builder have on the whole shown sufficient want of competence to warrant that in regard to the provision of housing they should be put under some form of central control. It is said that this would speed up building and reduce costs. From various quarters come different suggestions as to how this is to be done, and many of them cancel out; but all seem to agree upon mass production based on standard detailing. They point to the success made of mass production of small cars and steel casements, both of which are, however, the result of private enterprise. Within limits there is a good deal to be said for standard detailing, provided it is not carried too far. But to a large extent detail is a matter of taste. For my own part I should be quite content to fit all these new houses with 6 in. half-round quarter-metal cast-iron eaves gutters, and could, I think, make quite a good case for the selection of that pattern, size and quality. But what would the makers of other patterns have to say, and those who make asbestos cement gutters, and those who like wood lead lined, or even unlined gutters? I think that on this one point alone, at least a score of protesting deputations would have to be met, and if the whole idea is not to fail, be turned away unsatisfied. A year or two ago the housing project of one authority was held up for the better part of a year because it wanted to provide outside washhouses which the Ministry would not sanction. On the other hand, it is not economical for ordinary domestic work to detail special mouldings, for there are thousands of stock patterns to choose from, nearly every one of which has originated in some architect's detail. In the case of doors, it is seldom necessary to depart from stock patterns and sizes. It is cheaper to fit a stock pattern panelled and solid moulded 1½ in. door than to make up a ledged and braced door for the job. If the amount of timber used in a Columbian pine stock pattern door be measured and billed, it may be found that the builder could not buy it cut to size and planed for as little money as he would spend on a completed door. And so it is with nearly every article of joinery required for the building of a small house. There is a wide range of choice in regard to both quality and design offered at prices that make it impossible for the builder to turn the work off his own benches in competition. Nevertheless, there is that quality of style and finish about an architect's specially designed house that makes it well worth while when the cost can be afforded.



Skirtings.

To return to our main subject. It is a mistake to put a wooden skirting round a tiled or similarly finished floor, though it usually costs less to do so than to form one of tiles, or run one in cement. When 6 in. quarry tiles are used, a row of the same tiles placed on edge is not unsightly, provided the fixing is neatly done. Bull-nose brown glazed bricks set on edge to master the plastering make an agreeable finish to a red tile floor; but besides being a little expensive, especially so where there are many angles, a half-brick division wall entails a good deal of cutting. But a glance through a glazed brick manufacturer's catalogue will show that there are many ways of getting over such difficulties as these. Nearly all manufacturers of floor tiles make suitable skirtings, the coved patterns being perhaps the most favoured. Recently, metal skirtings have been offered and are apparently finding some favour. In a sense they are new, but forty years ago, angle iron was used in barrack rooms and married quarters for its resistance to hard wear.

(To be continued.)

Wells Cathedral.

The Friends of Wells Cathedral announce that Sir Charles Nicholson, Bart., F.R.I.B.A., 2, New-square, Lincoln's Inn, W.C.1, is preparing a design for a new porch at the western end of the south aisle of the nave.

Contemporary Industrial Design.

An exhibition of Contemporary Industrial Design will be held at Dorland Hall from October 18 to November 3. In the list of the committee are included the names of Mr. Oliver Hill, F.R.I.B.A., and Mr. Raymond McGrath, A.R.I.B.A. Designs for modern living-rooms, bedrooms, bathrooms, kitchens, and offices, will be found on the architectural side, while examples of design in various sides of life to-day are also included

TRADES UNION CONGRESS

THERE is very little matter arising out of the Trades Union Congress this year which falls within the scope of our columns, and therefore calls for any comment by us. On the Tuesday there was a debate on a resolution moved by Mr. R. G. Manson on the school-leaving age and juvenile labour. The resolution viewed with alarm the increasing employment of juveniles and the consequent exploitation of these young persons by working them long hours and paying them low wages, and demanded that the raising of the school-leaving age to sixteen years should be pressed for by the General Council and the Labour Party. Miss Bondfield, in supporting the resolution, referred to the Unemployment Insurance Act, and is reported as having said that the Ministry were not anxious to take over the task of looking after the young people, but were forced to do so by the appalling consequences of the gap which resulted from taking away the children from the influence of the educational authorities at fourteen and throwing them on to the labour market; and she considered that the best plan would have been not to have lowered the insurance age, but to have raised the education age, and, although she hoped something good might come out of the scheme for insurance, it was no substitute for raising the school age. The essential difficulties of any scheme for the provision of instruction for unemployed boys and girls were largely due to the fact that there would be a continually shifting population. The question is a very difficult one, but we wonder whether a solution could be found in substituting for the ordinary higher education, which tends rather to fit persons only for clerical occupation, classes in skilled trades under school discipline during the extra two years, which no doubt is the general principle of the Insurance Act. On the same day Mr. J. C. Little moved a resolution in which that Act was declared to be "the slave and blackleg Act," calling upon the Labour Party when returned to power to repeal the Act, another speaker having complained of the menace of the training camps to the standards of employment of skilled men, and the resolution was carried.

In the proceedings on Wednesday a resolution was passed instructing the General Council to use every means to induce the Government to adopt a forty-hour working week without reduction in wages or earnings, but Mr. H. B. Butler, in an interesting address on International Trade, pointed out that although no final result had been achieved, the International Labour Office had performed a valuable service in educating public opinion, but the question was not an easy one, and the problem of wages was particularly difficult to solve during a period of depression, and conditions were not the same in all industries.

On the last day, the Congress debated the scheme put forward by the General Council for the quasi-nationalisation of the iron and steel industries by the establishment of a public corporation, the control, both centrally and sectionally, being in the hands of boards whose members would be appointed by the President of the Board of Trade. The General Council's scheme was unanimously approved by Congress. At present, direct representation of the trade unions or of the workpeople is not provided for in the scheme and there has been some division of opinion between the General Council and the Labour Party Conference upon this point. At the present Conference a resolution was carried which adopted the view of the Labour Party Conference that the representation should be fifty per cent., and it is also a little significant that Mr. A. Pugh, who moved the main resolution as to the corporation, spoke of the necessity of retaining the right to strike and the complementary right of lock-out. If the representation of the workpeople was introduced into the scheme, presumably these could be omitted, but does the history of the existing public utility corporations, even under existing conditions, compare with private enterprise to the disadvantage of the latter, and what would be their position if fifty per cent. of the workpeople were represented in the management? The wage earner, whether employed by a public corporation or by private persons or companies, must have a paramount interest in his own remuneration and hours of work, but in both kinds of undertaking the maintenance of capital cannot be overlooked, and neglect of this in the private undertaking means financial difficulties, and in the case of the public corporation a call on the taxpayer. There is another consideration which is often overlooked. In these days of rapid advance, good plant has often to be scrapped for improved machinery, and in the private undertaking this loss falls on the shareholders or proprietors, but if it falls on the taxpayer there is the temptation to retain obsolete plant.

TOWN AND COUNTRY PLANNING

(*Continued from page* 405, *September* 7.)

THE following list of local authorities and joint executive committees engaged in the preparation of planning schemes has been issued by the Town and Country Planning Department of the Ministry of Health, and shows the stage reached in each case at March 31, 1934 :—

MIDDLESEX.—Acton T.C. (S.O.); Brentford and Chiswick T.C. (Brentford Area) (P.S.A.), (Chiswick Riverside Lands) (S.O.), (Chiswick Riverside Lands Amending Scheme) (S.O.), *(Heston and Isleworth T.C. No. 1); Ealing T.C. (Scheme A) (S.O.), Greenford (D.S.), (Hanwell No. 2) (D.S.), (Northolt) (S.S.), (Schemes B and C) (P.S.A.), (Scheme D) (P.S.); *Enfield U.D.C. (East Barnet Valley U.D.C. No. 1); Feltham U.D.C. (Main Area) (P.S.A.); Finchley T.C. (Nos. 1 to 5) (S.S.); Friern Barnet U.D.C. (P.S.A.); Hampton Wick U.D.C. (S.S.); Harrow-on-the-Hill U.D.C. (S.O.); Hayes and Harlington U.D.C. (Main Area) (P.S.A.); Hendon T.C. (Nos. 1, 2 and 3) (S.S.); Hendon R.D.C. (S.S.); Heston and Isleworth T.C. (P.S.A.); Kingsbury U.D.C. (D.S.); Ruislip-Northwood U.D.C. (Nos. 1 and 2) (S.O.), (Amendment Schemes Nos. 1 to 4) (S.O.); Southall-Norwood U.D.C. (No. 1) (P.S.A.); Southgate T.C. (Nos. 1 and 2) (S.S.), *(Enfield U.D.C. No. 1); South Mimms R.D.C. (No. 1) (P.S.A.), *(Barnet U.D.C. No. 1), *(East Barnet Valley U.D.C. No. 1); Sunbury-on-Thames U.D.C. (Main Area) (D.S.); Twickenham T.C. (P.S.); Uxbridge U.D.C. (No. 1) (P.S.A.), (transferred from Uxbridge R.D.C.) (D.S.), *(Ruislip-Northwood U.D.C. No. 2); *Wealdstone U.D.C. (Wembley U.D.C. No. 2); Wembley U.D.C. (Nos. 1 and 3) (S.S.), (No. 2) (P.S.A.); Willesden T.C. (S.O.); Wood Green T.C. (P.S.); Yiewsley and West Drayton U.D.C. (transferred from Uxbridge R.D.C.) (D.S.).

NORTHAMPTON.—*Brixworth R.D.C. (Northampton T.C. No. 1); *Hardingstone R.D.C. (Northampton T.C. No. 1); Northampton T.C. (P.S.); *Northampton R.D.C. (Northampton T.C. No. 1); Wellingborough U.D.C. (P.S.A.).

R.A.—Indicates that a resolution deciding to prepare a scheme, or authority to prepare a scheme, has become effective (whether or not passed, granted, or approved before the Act of 1932 came into operation), but that no preliminary statement or scheme has yet been submitted to the Minister.

P.S.—Indicates that a preliminary statement of proposals for development has been submitted but has not yet been approved by the Minister.

P.S.A.—Indicates that a preliminary statement has been approved by the Minister.

D.S.—Indicates that a draft scheme has been adopted but a scheme has not yet been submitted to the Minister.

S.S.—Indicates that a scheme has been submitted to, but has not been approved by, the Minister.

S.A.—Indicates that a scheme has been approved by the Minister and laid before Parliament.

S.O.—Indicates that a scheme has been laid before Parliament and is capable of coming into operation.

S.O.—Indicates that a scheme has become operative.

* Indicates that a portion of the authority's district is included in the area of a scheme being prepared by another authority, the name of which is shown in brackets.

† Indicates that, at the stage shown, the action has been taken by a joint executive committee or county council and not by the local authority itself.

NORTHUMBERLAND.—Blyth T.C. (P.S.A.); *Castle Ward R.D.C. (Newburn U.D.C. No. 1); Earsdon U.D.C. (P.S.A.), *(Tynemouth T.C. Nos. 3 and 4); Newcastle-upon-Tyne T.C. (Western) (P.S.A.); Seaton Delaval U.D.C. (P.S.A.); Wallsend T.C. (P.S.A.); Whitley and Monkseaton U.D.C. (No. 1) (P.S.A.), *(Tynemouth T.C. Nos. 1, 3 and 4).

NOTTINGHAM.—Carlton U.D.C. (No. 1) (P.S.A.); Hucknall U.D.C. (P.S.A.); Nottingham T.C. (Parts 1, 2, 3, 4 and 5) (S.S.); West Bridgeford U.D.C. (No. 1) (D.S.).

OXFORD.—†Henley R.D.C. (Section 2) (P.S.); Oxford T.C. (Regional Scheme) (P.S.A.); *Ploughley R.D.C. (Oxford T.C. Regional); †Witney U.D.C. (P.S.A.); †Witney R.D.C. (Nos. 1 and 2) (P.S.A.); †Woodstock T.C.

SALOP.—Atcham R.D.C. (Harlescott) (S.O.), *(Shrewsbury T.C. No. 2); *Bridgnorth R.D.C. (Bridgnorth T.C. No. 1); *Wellington R.D.C. (Wellington U.D.C. No. 1).

SOMERSET.—†Bath T.C.; *Bathavon R.D.C. (Bristol T.C. No. 3); *Bridgwater R.D.C. (Bridgwater T.C. No. 1); *Burnham-on-Sea U.D.C. (Bridgwater T.C. No. 1); *Clevedon U.D.C. (Bristol T.C. No. 3); *Long Ashton R.D.C. (Bristol T.C. No. 3); *Portishead U.D.C. (Bristol T.C. No. 3); Taunton T.C. (P.S.A.); *Taunton R.D.C. (Bridgwater T.C. No. 1), *(Taunton T.C. No. 1); *Williton R.D.C. (Bridgwater T.C. No. 1).

SOUTHAMPTON.—Alton R.D.C. (No. 1) (P.S.A.); *Droxford R.D.C. (Portsmouth T.C. Nos. 2, 6, 8, and Additional Area); *Fareham U.D.C. (Portsmouth T.C. Nos. 4 and 6); *Havant and Waterloo U.D.C. (Portsmouth T.C. Nos. 2 and 4); *New Forest R.D.C. (Southampton T.C. No. 2); *Petersfield U.D.C. (Portsmouth T.C. Nos. 2, 4, 6 and 8); *Romsey and Stockbridge R.D.C. (Southampton T.C. No. 1); Winchester T.C. (Main Area) (P.S.A.); *Winchester R.D.C. (Southampton T.C. No. 1), *(Winchester T.C. No. 1).

STAFFORD.—†Cheadle R.D.C. (Joint Committee Area) (P.S.); Leek U.D.C. (Main Area) (P.S.A.), †(Joint Committee Area) (P.S.); †Leek R.D.C. (P.S.), *(Stoke-on-Trent T.C. Northern); Newcastle-under-Lyme T.C. (transferred from Wolstanton United U.D.C.) (P.S.A.), *(Stoke-on-Trent T.C. Western No. 1), *(Western No. 3); Smethwick T.C. (P.S.A.); Stafford T.C. (P.S.A.); *Stafford R.D.C. (Stafford T.C. No. 1); Stoke-on-Trent T.C. (Western No. 1) (D.S.), (Eastern No. 1) (D.S.), (Southern) (P.S.A.), (Southern Extension) (P.S.A.), (Eastern No. 2) (P.S.A.), (Northern) (P.S.A.), (Western No. 2) (P.S.A.); *Stone R.D.C. (Stoke-on-Trent T.C. Western No. 1 and Southern Extension); *Tutbury R.D.C. (Burton-upon-Trent T.C. No. 1).

SURREY.—Banstead U.D.C. (transferred from Epsom R.D.C.-Banstead) (S.S.), transferred from Epsom R.D.C.-Cuddington (P.S.A.); Barnes T.C. (Nos. 1 and 2) (D.S.); Beddington and Wallington U.D.C. (South-No. 2) (S.O.), (transferred from Carshalton U.D.C.) (P.S.A.); *(Croydon T.C. Croydon South Scheme); Carshalton U.D.C. (No. 1) (P.S.A.), (transferred from Epsom R.D.C.) (S.S.), (transferred from Sutton and Cheam U.D.C.) (P.S.A.); Caterham and Warlingham U.D.C. (Caterham) (D.S.), Warlingham) (D.S.), *(Coulsdon and Purley U.D.C., No. 1 Scheme); Coulsdon and Purley U.D.C. (S.O.), (transferred from Caterham and Warlingham U.D.C.) (D.S.), (transferred from Carshalton U.D.C.) (P.S.A.), *(Croydon T.C. Croydon South Scheme); Croydon T.C. (East) (S.O.), (East No. 2) (S.O.), (North) (S.O.), (South) (S.O.), (South No. 2) (S.O.), (East No. 3) (S.S.), *(Mitcham U.D.C. No. 1. Scheme); Dorking U.D.C. (P.S.A.), (transferred from Epsom R.D.C.) (P.S.A.); Dorking and Horley R.D.C. (transferred from Epsom R.D.C.-Bookham) (P.S.A.), (transferred from Epsom R.D.C.-Headley (P.S.A.); Epsom U.D.C. (transferred from Epsom R.D.C.-Banstead, etc.) (S.S.), (Cuddington) (P.S.A.), (Surbiton U.D.C.) (P.S.A.); Esher U.D.C. (transferred from East and West Molesey U.D.C.) (P.S.A.), (Epsom R.D.C.) (P.S.A.), (Surbiton U.D.C.) (P.S.A.); Farnham U.D.C. (transferred from Farnham R.D.C.) (P.S.A.); Guildford R.D.C.

(transferred from Farnham R.D.C.) (P.S.A.); Hambledon R.D.C. (transferred from Farnham R.D.C. (P.S.A.); Haslemere U.D.C. (transferred from Farnham R.D.C.) (P.S.A.); Kingston-upon-Thames T.C. (transferred from Ham U.D.C. No. 1) (P.S.A.), (Maldens and Coombe U.D.C.) (S.S.), *(Maldens and Coombe U.D.C. No. 1); Leatherhead U.D.C. (transferred from Epsom R.D.C.-Ashstead) (P.S.A.), (-Bookham) (P.S.A.); Maldens and Coombe U.D.C. (S.S.) (transferred from Epsom R.D.C.) (P.S.A.), Merton and Morden U.D.C. (P.S.A.), transferred from Carshalton U.D.C.) (P.S.A.), *(Mitcham U.D.C. No. 1 Scheme); Mitcham U.D.C. (No. 1) (S.O.), (No. 2) (D.S.), *(Wimbledon T.C. No. 1 Scheme); Richmond T.C. (No. 1) (S.O.), (transferred from Ham U.D.C.) (P.S.A.); Surbiton U.D.C. (P.S.A.), (transferred from Epsom R.D.C.) (P.S.A.), (transferred from Maldens and Coombe U.D.C.) (S.S.); Sutton and Cheam U.D.C. (No. 1) (P.S.A.), (Brighton Road) (P.S.A.), (Cheam) (P.S.A.), (transferred from Carshalton U.D.C.) (P.S.A.), (Epsom R.D.C.-Banstead) (S.S.), (-Cuddington) (P.S.A.), (Maldens and Coombe U.D.C.) (S.S.).

SUFFOLK, EAST.—*Plomsegate R.D.C. (Aldeburgh T.C. No. 2); †Woodbridge U.D.C. (P.S.A.); †Woodbridge R.D.C. (P.S.A.), *(Ipswich T.C. No. 1).

SUSSEX, EAST.—Battle R.D.C. *(Hastings T.C. No. 1); Brighton T.C. (Steyning East No. 1 Part) (P.S.A.); Eastbourne T.C. (No. 1) (P.S.A.); Eastbourne R.D.C. *(Eastbourne T.C. No. 1, Additional area); Hastings R.D.C. *(Hastings T.C. No. 1); Hove T.C. (P.S.A.); Portslade-by-Sea U.D.C. (Main Area) (P.S.A.); Seaford U.D.C. (P.S.A.); Ticehurst R.D.C. *(Tunbridge Wells T.C. No. 1).

SUSSEX, WEST.—Southwick U.D.C. (Nos. 1 and 2) (P.S.A.).

WARWICK.—*Bedworth U.D.C. (Coventry T.C. No. 1); Birmingham T.C. (Quinton, etc.) (S.O.), (East) (S.O.), (North Yardley) (S.O.), (North Yardley, amending) (S.O.), (East, amending) (S.O.), (No. 2) (S.O.), (South) (S.O.), (South-West) (D.S.); Coventry T.C. (Stoneleigh) (P.S.A.); Leamington Spa (Royal) T.C (P.S.A.); Meriden R.D.C. *(Birmingham T.C. North Yardley and Stetchford Scheme), *(Coventry T.C. No. 1); Rugby R.D.C. *(Coventry T.C. No. 1); Stratford-on-Avon R.D.C. *(Stratford-on-Avon T.C. No. 1); Sutton Coldfield (No. 1) (P.S.A.); Warwick T.C. *(Leamington Spa T.C. No. 1); Warwick R.D.C. (Stoneleigh and Baginton) (P.S.A.), *(Coventry T.C. No. 1).

WORCESTER.—Bromsgrove U.D.C. (No. 1) (S.O.); Halesowen U.D.C. (transferred from Oldbury U.D.C.) (S.S.); Oldbury U.D.C. (Warley and Cakemore) (S.S.).

YORK (EAST RIDING).—*Beverley T.C. (Kingston-upon-Hull T.C. North and West); *Beverley R.D.C. (Kingston-upon-Hull T.C. North and West); *Bridlington R.D.C. (Bridlington T.C. Nos. 1 and 3); *Cottingham U.D.C. (Kingston-upon-Hull T.C. North and West); *Escrick R.D.C. (York T.C. Nos. 1 and 5); *Hedon T.C. (Kingston-upon-Hull T.C. South-East Scheme); *Hessle U.D.C. (Kingston-upon-Hull North and West); Hornsea U.D.C. (P.S.A.); Kingston-upon-Hull T.C. (South-East) (S.O.), (North-East and Sutton) (S.O.), (North-East, amending) (S.O.); *Patrington R.D.C. (Kingston-upon-Hull T.C. South-East Scheme); Sculcoates R.D.C. *(Kingston-upon-Hull T.C. North-East and Sutton Scheme), *(Kingston-upon-Hull T.C. South-East Scheme), *(Kingston-upon-Hull T.C. North and West); Skirlaugh R.D.C. *(Kingston-upon-Hull T.C. S.E. Scheme), *(Kingston-upon-Hull Northern and Western); York T.C. (Nos. 1-4, 6 and 7) (P.S.A.).

YORK (NORTH RIDING).—*Croft R.D.C. (Darlington T.C. No. 2); *Flaxton R.D.C. (York T.C. Nos. 1 and 1a); Richmond T.C. (P.S.A.); Saltburn and Marske-by-the-Sea U.D.C. (Hazelgrove) (D.S.); *Scalby U.D.C. (Scarborough T.C. No. 4); Scarborough T.C. (No. 1) (S.O.); Scarborough R.D.C. *(Scarborough T.C. No. 4), *(Scalby U.D.C. No. 1); Thornaby-on-Tees T.C. (No. 1) (P.S.A.).

NEW BUILDINGS IN LONDON.

ALDWYCH.—BUILDING.—The L.C.C. has approved a building lease for the Bush House (Extensions), Ltd., in respect of the site with frontages to the Strand and Montreal-place. The architects connected with the scheme are Messrs. Smee and Houchin, 22, Essex-street, Strand, W.C.2, and the building work is being carried out by Messrs. John Mowlem & Co., Ltd., 91, Ebury Bridge-road, S.W.1.

BARNET. — HOUSES. — Among proposed new properties to be erected by private enterprise, for which plans were approved by the U.D.C., were the following: 120 semi-detached houses in Sherrard's-way, Grosvenor-avenue, and Linkway, for the Empire Construction Co.; 10 semi-detached houses on the west side of Kenerne-drive, submitted by Reads, Ltd.; and a filling station at Great North-road, submitted by R. T. Grummant.

BURY-STREET, E.C.—REBUILDING.—Messrs. Leighton and Higgs, 9, St. Thomas's-street, are the architects, and Messrs. Patman and Fotheringham, Ltd., 15, Park-street, Islington, N.1, are the builders, for the rebuilding of Nos. 7 and 8.

CATFORD.—STATION.—An application has been made to the L.C.C. for erection of a petrol filling station on a site adjoining the open-air swimming bath in Bromley-road. Mr. G. T. Harman, A.R.I.B.A., 90a, High-street, S.E.13, is the architect.

CHADWELL HEATH.—BUILDING.—A site of over twelve acres adjoining the railway line on the L.C.C. Becontree Estate at Chadwell Heath has just been purchased by Messrs. Lewis Berger and Sons, Ltd., paint and varnish manufacturers, of Homerton, E.9. Part of the land will be utilised immediately and roads are already being laid. Messrs. Chamberlain and Willows, Moorgate, E.C., are connected with the scheme

CLEMENT'S INN.—EXTENSION.—A contract has been placed with Messrs. F. R. Hipperson and Son, Ltd., 6, Broad-street-place, E.C.2, for extensions to the Government Laboratory in Clement's Inn, W.C.2.

DAGENHAM.—HOUSES.—The U.D.C. has approved plans submitted by Messrs. Richard Costain, Ltd., 7, Norfolk-street, W.C.2, for 74 houses on the north side of New-road, Dagenham.

DAGENHAM. — CHURCH. — Another new church is to be erected, and plans have been submitted to the Bishop of Chelmsford's Appeal Committee. The architects are Messrs. Milner and Craze, 5, Racquet-court, E.C.4.

DOWNHAM.—BATHS.—The Lewisham B.C. has recommended for approval the provision of swimming-baths and library at Durham Hill, Downham.

EDMONTON. — BUILDING. — Tenders are being invited by the E.C. for the erection of a detached handicraft room in the playground of the Silver-street School, N.18. Application should be made to Mr. E. O. Taylor, Director and Secretary, Education Offices, Brettenham-road, N.18, on deposit of 10s. Tenders are to be in by September 24.

ESSEX.—BUILDING.—The Essex Standing Joint Committee has prepared a programme of building works for the present year and the succeeding three years, as follows: Billericay—new police station and court house, £11,000 (1937-38); sites for Billericay, Mistley and Ongar, £3,000 (1934-35); housing —150 houses, including sites, £75,000, £25,000 (1934-35), £25,000 (1935-36), £25,000 (1936-37); Hornchurch—increased accommodation and station, £1,600 (1935-36).

FINCHLEY.—PAVILION.—September 24 is the sending-in date for the erection of a pavilion in the Lyttelton Playing Fields, Hampstead Garden Suburb. The work is for the Finchley T.C., and Mr. P. T. Harrison, M.Inst.C.E., Borough Engineer and Surveyor, 9, The Hawthorns, Regent's Park-road, N.W.3, has prepared the plans.

FOREST HILL.—FLATS.—The Leamington Court Estates, Ltd., Western-avenue, Acton, W.3, have made an application to the L.C.C. for erection of flats in Dartmouth-road.

HOUNSLOW.—BUILDING.—The Commercial Structures, Ltd., 61, City-road, E.C.1, have secured the contract for erection of an Inland Revenue office at Hounslow for H.M.O.W.

ISLINGTON.—RECONSTRUCTION.—The B.C. are inviting tenders for demolition, alteration and reconstruction of premises at the electricity works, Eden-grove, N.7, for the accommodation of switchgear. Mr. E. C. P. Monson, F.R.I.B.A., Finsbury Pavement House, 120, Moorgate, E.C.2, has prepared the plans, and tenders are to be returned by October 3.

KINGSBURY.—BUNGALOWS.—Mr. E. A. Beaumont, A.F.A.S., 300, Neasden-lane, Neasden, N.W.10, is preparing plans for the Neasden Property Co., for the remainder of the Parkfields Estate, comprising a further 60 bungalows

LEWISHAM. — HALL. — Mr. E. W. F. Pease has made an application to the B.C. for a hall adjoining St. Swithun's Church, St. Swithun's-road.

LEWISHAM. — ADDITIONS. — Mr. G. T. Harman, A.R.I.B.A., 90a, High-street, S.E.13, is the architect for additions to St. Dunstan's Hall, Brookehowse-road.

RICHMOND.—HOUSES.—T.C. are inviting tenders for the erection of (1) 32 houses at Marksbury estate; (2) 18 houses at Windham-road; and (3) 20 houses at Lovell-road, Ham. The plans are by the Borough Engineer, Hotham House, Heron Court, and October 2 is the sending-in date.

STEPNEY.—DWELLINGS.—Stepney B.C. are to progress with the erection of dwellings upon the Branch-road site, to plans by Messrs. Adshead and Ramsey, FF.R.I.B.A., 46, Great Russell-street. Applications to tender must be made to the Town Clerk, Raine-street, E.1, by September 21.

SUDBURY HILL.—HOUSES.—Development has commenced on the Oldfield Estate at Sudbury Hill, where provisional plans have been approved for over 1,700 houses and a large shopping area. The estate is to be sold in lots. The sole agents are Messrs. Clifford and Clifford, Ltd., of 28, Ealing-road, Wembley.

SUTTON.—FLATS, ETC.—A new company has been formed under the title of Chiltern Court (Sutton), Ltd., 31, Craven-street, Strand, W.C.2, for the purpose of erecting flats, shops, houses and garages, etc.

SYDENHAM.—HOUSES.—Mr. T. Spencer Bright, consulting surveyor, 2, New-court, W.C.2, has submitted an application to the L.C.C. which has been forwarded to the Lewisham B.C. for approval, for the erection of houses in Southend-lane.

WALTHAM.—BUILDING.—Joint Hospital Board are inviting tenders for the erection of new buildings and alterations to existing buildings in extending by 90 beds the present Isolation Hospital in Honey-lane, Waltham Abbey. Particulars may be obtained from Mr. R. A. Gale, clerk, not later than September 25, at a deposit of £5 5s.

WEST HAM.—HOUSES.—The tender of Mr. William J. Jerram, of Sandford Works, East Ham, has been accepted by the West Ham Town Council for the erection of 42 houses in Samson-street, Plaistow. The contract is to be completed within six months.

WHITEHALL.—ALTERATIONS.—Are now being carried out at No. 47 by Messrs. Patman and Fotheringham, Ltd., 15, Park-street, Islington, N.1.

YIEWSLEY. — COTTAGES. — Thirty-six non-parlour cottages are proposed at the Moor, Harmandsworth, by Yiewsley and West Drayton U.D.C. Tenders for these, and the requisite roads and sewers, are invited, upon deposit of £2 2s. each contract, by the U.D.C., and are returnable by September 24.

RATES OF WAGES IN THE BUILDING TRADE

AS AND FROM 1st FEBRUARY, 1934.

[Every endeavour is made to ensure accuracy, but we cannot be responsible for errors.]

	Crafts-men.	Lab-ourers.
Aberdare	1/5	1/0½
Abergavenny	1/5	1/0½
Aberystwyth	1/2	10½
Accrington	1/5½	1/1½
Aldeburgh	1/1½	10½
Aldershot	1/2½	11
Alfreton	1/5½	1/1½
Alnwick	1/4½	1/0½
Altrincham	1/5½	1/1½
Amble	1/4½	1/0½
Amersham	1/3½	11½
Ammanford	1/5½	1/1½
Andover	1/2½	11
Arundel	1/2½	11
Ascot	1/3½	11½
Ashby-de-la-Zouch	1/4	1/–
Ashford (Kent)	1/2½	11
Ashford (Middx.)	1/4	1/–
Ashington	1/4½	1/0½
Ashtead	1/4	1/–
Ashton-under-Lyne	1/5½	1/1½
Aylesbury	1/2½	11
Aylsham	1/2	10½
Bagshot	1/2½	11
Banbury	1/3	11½
Barnsley	1/5½	1/1½
Barnstaple	1/3½	11½
Barrow-in-Furness	1/5½	1/1½
Barry	1/5½	1/1½
Basingstoke	1/3	11½
Bath	1/4½	1/0½
Batley	1/5½	1/1½
Beaconsfield	1/3½	11½
Beccles	1/2	10½
Bedford	1/4½	1/0½
Berkhamsted	1/3	11½
Berwick	1/4½	1/0½
Beverley	1/5½	1/1½
Bexhill	1/3	11½
Bideford	1/3½	11½
Biggleswade	1/3	11½
Billericay	1/2	10½
Birchington	1/3	11½
Birkenhead	1/7‡	1/2½
Birmingham	1/5½	1/1½
Bishop Auckland	1/5	1/0½
Bishops Stortford	1/3	11½
Blackburn	1/5½	1/1½
Blackpool	1/5½	1/1½
Blyth	1/5½	1/1½
Bognor Regis	1/3	11½
Bolton	1/5½	1/1½
Bournemouth	1/4	1/–
Bracknell	1/3	11½
Bradford	1/5½	1/1½
Bradford-on-Avon	1/2½*	11
Braintree	1/3½	11½
Brentwood	1/5	1/0½
Bridgwater	1/3	11½
Bridlington	1/5	1/0½
Brighouse	1/5½	1/1½
Brighton	1/4	1/–
Bristol	1/5½	1/1½
Broadstairs	1/3	11½
Bromsgrove	1/4½	1/0½
Bromyard	1/2	10½
Buckley	1/5½	1/1½
Bungay	1/1½	10½
Burnham-on-Crouch	1/2	10½
Burnley	1/5½	1/1½
Burslem	1/5½	1/1½
Burton-on-Trent	1/5½	1/1½
Bury	1/5½	1/1½
Bury St. Edmunds	1/2½	11
Buxton	1/5	1/0½
Byfleet	1/3	11½
Cambridge	1/5	1/0½
Canterbury	1/3	11½
Cardiff	1/5½	1/1½
Carlisle	1/5½	1/1½
Carnforth	1/5½	1/1½
Castleford	1/5½	1/1½
Caterham	1/4	1/–
Chard	1/2*	10½
Chatham	1/3½	11½
Chelmsford	1/4	1/–
Cheltenham	1/4	1/–
Chepstow	1/4½	1/0½
Chertsey	1/4	1/–
Chester	1/5½	1/1½
Chesterfield	1/5½	1/1½
Chichester	1/3	11½
Chorley	1/5½	1/1½
Cirencester	1/3*	11½
Clacton	1/3½	11½
Cleveleys	1/5½	1/1½
Clitheroe	1/5½	1/1½
Cobham	1/4	1/–
Colchester	1/4	1/–
Colwyn Bay	1/4½	1/0½
Congleton	1/5	1/0½
Coventry	1/5½	1/1½
Cranbrook	1/2	10½
Cranleigh	1/2½	11
Crawley	1/3	11½
Crewe	1/4½	1/0½
Cromer	1/2½	11
Crowborough	1/3	11½
Cuckfield	1/3	11½
Darlington	1/5½	1/1½
Darwen	1/5½	1/1½
Daventry	1/4	1/–
Deal	1/3	11½
Denbigh	1/4	1/–
Derby	1/5½	1/1½
Devizes	1/2*	10½
Dewsbury	1/5½	1/1½
Didcot	1/3½	11½
Diss	1/2	10½
Doncaster	1/5½	1/1½
Dorchester	1/2½*	11
Dorking	1/3	11½
Dover	1/3	11½
Dovercourt	1/3½	11½
Driffield	1/4	1/–
Droitwich	1/4½	1/0½
Dudley	1/5½	1/1½
Dunstable	1/2	10½
Durham	1/5½	1/1½
Eastbourne	1/4	1/–
E. Glam. (Mon. Val.)	1/5	1/0½
East Grinstead	1/3	11½
Edenbridge	1/3	11½
Ely	1/2	10½
Epping	1/4½	1/0½
Exeter	1/4½†	1/0½
Exmouth	1/3½	11½
Fakenham	1/2	10½
Falmouth	1/3½	11½
Fareham	1/3	11½
Faversham	1/2½	11
Felixstowe	1/4	1/–
Filey	1/4	1/–
Fleetwood	1/5½	1/1½
Flint	1/5	1/0½
Folkestone	1/3	11½
Frinton-on-Sea	1/3½	11½
Frome	1/2½*	11
Gainsborough	1/4½	1/0½
Gateshead	1/5½	1/1½
Gillingham	1/3½	11½
Glossop	1/5	1/1½
Gloucester	1/4½†	1/0½
Godalming	1/3½	11½
Goole	1/4½	1/0½
Gosport	1/4½	1/0½
Grantham	1/4	1/–
Gravesend	1/5	1/0½
Gt. Yarmouth	1/3	11½
Grimsby	1/5½	1/1½
Guildford	1/3½	11½
Guilsborough	1/4	1/–
Halifax	1/5½	1/1½
Hanley	1/5½	1/1½
Harpenden	1/3	11½
Harrogate	1/5½	1/1½
Hartlepools	1/5½	1/1½
Harwich	1/3½	11½
Haslemere	1/2½	11
Hastings	1/3	11½
Hatfield	1/4½	1/0½
Haywards Heath	1/3	11½
Hednesford	1/5	1/0½
Hemel Hempstead	1/4	1/0
Henley	1/3½	11½
Hereford	1/3½*	11½
Herne Bay	1/3	11½
Hertford	1/4½	1/0½
Heysham	1/5½	1/1½
Hitchin	1/3½	11½
Hoddesdon	1/4½	1/0½
Holt	1/1½	10½
Horley	1/3	11½
Horsham	1/2½	11
Horwich	1/5½	1/1½
Huddersfield	1/5½	1/1½
Hull	1/5½	1/1½
Hunstanton	1/2	10½
Huntingdon	1/2½	11
Ilfracombe	1/3½	11½
Ingatestone	1/3	11½
Ipswich	1/4½	1/0½
Isle of Thanet	1/3	11½
Isle of Wight	1/2	10½
Keighley	1/5½	1/1½
Kenilworth	1/5½	1/1½
Kettering	1/4½	1/0½
Kidderminster	1/4½	1/0½
King's Lynn	1/3	11½
Kirkham	1/5½	1/1½
Knowle	1/5	1/0½
Lancaster	1/5½	1/1½
Leamington	1/5	1/0½
Leatherhead	1/4	1/–
Leeds	1/5½	1/1½
Leicester	1/5½	1/1½
Leighton Buzzard	1/2	10½
Letchworth	1/3½	11½
Lewes	1/2	10½
Lichfield	1/4½	1/0½
Lincoln	1/5½	1/1½
Littlehampton	1/3	11½
Liverpool	1/7‡	1/2½
Llandudno	1/4½	1/0½
Llanelly	1/5½	1/1½
London—		
12 m. radius	1/7*	1/2½
12-15 m. radius	1/6½*	1/2
Long Eaton	1/5½	1/1½
Longton	1/5½	1/1½
Loughborough	1/5½	1/1½
Louth	1/4	1/–
Lowestoft	1/3	11½
Luton	1/4	1/–
Macclesfield	1/5	1/0½
Maidenhead	1/4	1/–
Maidstone	1/3½	11½
Malvern	1/4	1/–
Manchester	1/5½	1/1½
Manningtree	1/2	10½
Mansfield	1/5½	1/1½
March	1/2	10½
Margate	1/3	11½
Market Harborough	1/4½	1/0½
Matlock	1/4	1/–
Melton Constable	1/1½	10½
Melton Mowbray	1/4½	1/0½
Merthyr Tydfil	1/5	1/0½
Middlesbrough	1/5½	1/1½
Middleton	1/5½	1/1½
Middlewich	1/4½	1/0½
Milford Haven	1/3½	11½
Morecambe	1/5½	1/1½
Morley	1/5½	1/1½
Mundesley	1/2	10½
Nantwich	1/4½	1/0½
Newark	1/4½	1/0½
Newbury	1/2½	11
Newcastle-on-Tyne	1/5½	1/1½
Newcastle-u-Lyme	1/5½	1/1½
New Forest	1/2½	11
Newmarket	1/3	11½
Newport, Mon.	1/5½	1/1½
Newport Pagnell	1/2½	11
Northampton	1/5½	1/1½
Norwich	1/5	1/0½
Nottingham	1/5½	1/1½
Nuneaton	1/5½	1/1½
Oakham	1/4	1/–
Oldham	1/5½	1/1½
Ormskirk	1/5½	1/1½
Oxford	1/4½	1/0½
Oxted	1/2½	11
Paignton	1/4½	1–0½
Peterborough	1/4½	1/0½
Plymouth	1/5½†	1/1½
Pontypridd	1/5	1/0½
Portsmouth	1/4½	1/0½
Port Talbot	1/5½	1/1½
Preston	1/5½	1/1½
Pulborough	1/2	10½
Ramsgate	1/3	11½
Reading	1/4½	1/0½
Redcar	1/5½	1/1½
Redditch	1/4½	1/0½
Redhill	1/3½	11½
Reigate	1/3½	11½
Retford	1/4	1/–
Ripon	1/4	1/–
Rochdale	1/5½	1/1½
Rochester	1/3½	11½
Rugby	1/5½	1/1½
Saffron Walden	1/2	10½
St. Albans	1/5	1/0½
St. Helens	1/5½	1/1½
St. Neots	1/2½	11
Salisbury	1/2½*	11
Salisbury Plain	1/2½*	11
Sawbridgeworth	1/3½	11½
Saxmundham	1/1½	10½
Scarborough	1/5	1/0½
Selby	1/5½	1/1½
Sevenoaks	1/3½	11½
Sheerness	1/3	11½
Sheffield	1/5½	1/1½
Shipley	1/5½	1/1½
Shoeburyness	1/4½	1/0½
Shoreham	1/4	1/–
Shrewsbury	1/4½	1/0½
Sittingbourne	1/2½	11
Skegness	1/4½	1/0½
Sleaford	1/4	1/–
Slough	1/4½	1/0½
Southampton	1/4½	1/0½
Southend-on-Sea	1/4½	1/0½
Southport	1/5½	1/1½
South Shields	1/5½	1/1½
Spalding	1/3	11½
Stafford	1/5	1/0½
Staines	1/4	1/–
Stamford	1/4	1/–
Stevenage	1/3½	11½
Stockport	1/5½	1/1½
Stockton-on-Tees	1/5½	1/1½
Stoke-on-Trent	1/5½	1/1½
Stourbridge	1/5	1/0½
Stourport	1/4½	1/0½
Stowmarket	1/2	10½
Stratford-on-Avon	1/4	1/–
Stroud	1/3½†	11½
Sunderland	1/5½	1/1½
Sutton Coldfield	1/5½	1/1½
Swaffham	1/1½	10½
Swanage	1/3½*	11½
Swansea	1/5½	1/1½
Swindon	1/4*	1/–
Tamworth	1/5	1/0½
Taunton	1/3½	11½
Tenterden	1/2½	11
Tewkesbury	1/4*	1/–
Thetford	1/2	10½
Thorpe Bay	1/4½	1/0½
Todmorden	1/5½	1/1½
Tonbridge	1/3½	11½
Torquay	1/5	1/0½
Totnes	1/3½†	11½
Trowbridge	1/2½*	11
Truro	1/2½	11
Tunbridge Wells	1/3½	11½
Uppingham	1/4	1/–
Uttoxeter	1/3½	11½
Wakefield	1/5½	1/1½
Walsall	1/5½	1/1½
Walsden	1/5½	1/1½
Walton-on-Naze	1/3½	11½
Ware	1/4½	1/0½
Warminster	1/2½*	11
Warrington	1/5½	1/1½
Warwick	1/5	1/0½
Wellingborough	1/4½	1/0½
Wells (Norfolk)	1/1½	10½
Welwyn	1/3	11½
Welwyn Gar. City	1/5½	1/1½
West Bromwich	1/5½	1/1½
Westcliff-on-Sea	1/4½	1/0½
Weston-super-Mare	1/4½	1/0½
Weybridge	1/4	1/–
Weymouth	1/3*	11½
Whitby	1/4½	1/0½
Whitstable	1/3	11½
Widnes	1/5½	1/1½
Wigan	1/5½	1/1½
Wigton	1/4	1/–
Wellington	1/5	1/0½
Wilmslow	1/5½	1/1½
Winchester	1/3½	11½
Windermere	1/3½	11½
Windsor	1/4½	1/0½
Wisbech	1/2	10½
Witham	1/3½	11½
Woking	1/3½	11½
Wokingham	1/3½	11½
Wolverhampton	1/5½	1/1½
Woodbridge	1/2	10½
Worcester	1/4½	1/0½
Workington	1/4	1/–
Worksop	1/4	1/–
Worthing	1/3	11½
Wrexham	1/5	1/0½
Wroxham	1/2½	11
Wycombe	1/4	1/–
Wymondham	1/1½	10½
Yeovil	1/3*	11½
York	1/5½	1/1½

* Painters, 1d. less than other Craftsmen. † Painters, ½d. less than other Craftsmen. ‡ Plasterers 1s. 8d.

For Building Trade Wages in Scotland, see page 468.

CONTRACTS OPEN

For some contracts still open, but not included in this list, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender, that a fair wages clause shall be observed, that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender, unless stated to the contrary.

The date given is the latest date when the tender, or the names of those willing to submit tenders, may be sent in, the name and address at the end is the person from whom or place where quantities, forms of tender, etc., may be obtained.

Following is a list of abbreviations:—Borough Surveyor, B.S.; Borough Engineer, B.E.; District Surveyor, D.S.; Town Clerk, T.C.; County Engineer, C.E.; County Surveyor, C.S.; Surveyor, S; Engineer, E.

BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, etc.

SEPTEMBER 17.

Ardsley East and West.—Painting.—Of 334 houses on various estates, for U.D.C. F. Arthur Brown, Blackgates School, Tingley, near Wakefield.

Blaenavon. — Erection. — Junior Mixed and Infants' School, at Park-st., for Monmouthshire E.C. John Bain, Newport, Mon. Dep. £5 5s.

Bristol.—Abattoir.—At Gordon-rd., Whitehall, for T.C. H. M. Webb, City E. and C., 63, Queen-sq.

Cheltenham.—Alterations.—And extensions to ladies' cloakroom, Town Hall, together with ancillary works, for T.C. G. Gould Marsland, Borough and Water Engineer.

Clown.—Houses.—24, at Bakestone Moor, for R.D.C. W. J. Gallagher, S. Dep. £2 2s.

Croydon.—Erection.—Of dressing cubicles, filtration chamber, offices, lavatories, construction of swimming pool and cascades, also erection of two sports pavilions upon sites at Playing Fields, Purley Way, for C.B. Town Clerk. Dep. £3 3s.

Edmonton.—Extensions.—To nurses' home at North Middlesex County Hospital, for Middlesex C.C. County Architect, 10, Great George-st., Westminster, S.W.1. Dep. £2 2s.

Frome.—Painting.—Exteriors of 18 houses at Faulkland, 8 at Nunney, 2 at Rudge, and 2 at Buckland, for R.D.C. H. L. Burt, Sanitary S.

Grimsby.—Vagrancy Wards.—At Scartho-rd. Institution, for T.C. H. Gilbert Whyatt, B.E. and S. Dep. £2 2s.

Grimsby.—Administration Block.—At Corporation Hospital, Scartho, for T.C. H. Gilbert Whyatt B.E. and S. Dep. £3 3s.

Ilford.—School Buildings.—On site situated in Perryman's Farm-rd., Newbury Park, adjoining Newbury Park School, for B.C. L. E. J. Reynolds, architect, Town Hall. Dep. £5 5s.

***Kettering.**—Houses.—36, on Brook-st. site, for U.D.C. E. and S., 3, Gold-st. Dep. £2 2s.

***Kettering.**—Erection.—Of public sanitary conveniences in Rockingham-rd. pleasure ground, for U.D.C. E. and S., 3, Gold-st. Dep. £2 2s.

Liverpool.—Re-tiling.—Of roof and painting exterior of Lake Vyrnwy hotel and outbuildings, for T.C. Resident Engineer's office, Lake Vyrnwy.

Manchester.—Builder's Work.—And steelwork in switch house and battery room, at Stuart-st. Power Station. H. C. Lamb. Dep. £2 2s.

Manchester.—Building.—Brick building at Hollingworth, for T.C. Chief Engineer, Waterworks Offices.

Market Bosworth.—Offices.—For R.D.C. G. Smith, architect, Moorewood House, Desford.

Near Denbigh.—Heating.—Provision and installation of low-pressure hot-water heating system in block 6 at the North Wales Sanatorium, near Denbigh, for King Edward VII. Welsh National Memorial Association. F. J. Alban, secretary, Memorial Offices, Westgate-st., Cardiff.

Neath.—Houses.—46, at various sites, for R.D.C. J. T. Jones, E. and S., Orchard-st. Dep. £1 1s.

Northampton.—Houses.—50, on St. David's estate, Kingsthorpe, for T.C. R. A. Winfield, B.E. Dep. £5.

Wallingford.—Houses.—10, at North Moreton and East Hagbourne, for R.D.C. F. H. Floyd, F.R.I.B.A., St. Nicholas House, West Mills, Newbury.

Woking.—Erection.—7 houses in Eden Grove-rd., Byfleet, for U.D.C. G. F. Hawkins, E. and S. Dep. £2 2s.

York.—Flats.—24, in Lucas-av., Burton Stone-lane, for T.C. F. W. Spurr, City E. Dep. £2 2s.

SEPTEMBER 18.

Clown. — Conversion. — Of approximately 350 closets at Creswell, for R.D.C. W. J. Gallagher, S.

Kingston-upon-Hull. — Painting.—At Sculcoates Power Station, and erection of sub-station at Greenwood, for T.C. J. N. Waite, City Electrical E., Ferensway. Dep. £1.

Kingston-upon-Hull. — Extension. — To northern cemetery, for T.C. J. E. Roberts, General Superintendent, Ferensway-chambs., Ferensway, Hull.

Kingston-upon-Hull. — Building. — Building for Loveridge sub-station; roofing at Hotham-st. sub-station, and building for Newington sub-station, for T.C. J. N. Waite, City Electrical Engineer. Dep. £1.

Longbenton.—Painting.—Outside of following Council houses: 22 houses at Burradon scheme, 20 houses at Forest Hall assisted scheme, 96 houses at Glebe scheme, Forest Hall, 38 houses at Benton-sq. scheme, for U.D.C. W. Bean, S.

Manchester.—Erection.—Of two blocks of shops at Sale-rd. Circle (south side) on Wythenshawe Estate, for Corporation. City Architect, Town Hall. Dep. £1 1s.

Manchester.—Extensions.—At Moss Hall Farm, Carrington, for T.C. City Architect. Dep. £1 1s.

Portsmouth.—Sub-station.—At Eastern-rd. and Vivash-rd., for Electricity Dept. Engineer and Manager, Electricity Dept., 111, High-st.

Sheffield.—Wards.—Two, at Lodge Moor Hospital (Contract No. 3), for T.C. W. Geo. Davies, F.R.I.B.A., City Architect. Dep. £2.

Sheffield.—Houses.—218, on Brushes and Stubbin estates, for T.C. W. Geo. Davies, City Architect. Dep. £2.

SEPTEMBER 19.

Chelmsford.—Painting.—External of municipal offices, Rainsford House, Duke-st., for T.C. V. J. Willis, B.E. and S. Dep. £1 1s.

Frome.—Houses.—20 at Coleford, and 10, at Munney, for R.D.C. R. W. H. Vallis, Council's Architect, Monmouth House. Dep. £1 1s.

Henley-on-Thames.—Redecorations.—At "Smith" Hospital, Fair Mile. E. V. Ive, Hillside, Henley-on-Thames.

Jarrow.—Houses.—160, at Monkton, for T.C. B.E. Dep. £5 5s.

Leeds.—Shops.—32, on Ginton, Potternewton, Middleton and York-rd. estates, for Corporation. Town Clerk, Room 57, Civic Hall. Dep. £10.

Leeds.—Houses.—974, on Gipton housing estate, for Corporation. Town Clerk, Room 57, Civic Hall. Dep. £10.

Scarborough.—Convenience.—At Westborough and New-rd., for T.C. J. Paton Watson, Borough and Water Engineer. Dep. £1 1s.

Sevenoaks.—External Painting.—And repairs at North Isolation Hospital, Otford, for R.D.C. S.

Worcestershire. — Repairs.—Repairs, painting, etc., at 15, 17, 19, 21, 23 and 25, Allesboro Hill bungalows, Pershore, for C.C. A. V. Rowe, County Architect, 38, Foregate-st., Worcester.

SEPTEMBER 20.

Bournemouth.—Erection.—Of post office, garage, and engineers' store, for H.M.O.W. Room 65D, Third Floor, H.M. Office of Works, London, S.W.1. Dep. £1.

Holywell.—Converting.—Of sanitary conveniences to water carriage system at Newmarket housing scheme, and connecting main water supply and work incidental thereto to houses at Halkyn (Pentre) housing scheme, for R.D.C. R. D. Jones, M.I.M.Cy.E.

Kirkcaldy.—Erection.—Of Forth Park Maternity Hospital, for T.C. Wm. Williamson & Hubbard, F.R.I.B.A., chartered architects, Kirkcaldy. Dep. £2 2s.

***Leighton Buzzard.** — Houses. — 24, on various sites, for U.D.C. B. H. Robjaub. Dep. £2 2s.

Reading.—Convenience.—In Kentwood Hill, Tilehurst, near "White House" public-house, for T.C. B.S. Dep. £2 2s.

SEPTEMBER 21.

Durham.—School.—Easington Colliery new intermediate council school, for C.C. F. Willey, F.R.I.B.A., architect to the E.C., 34, Old Elvet, Durham.

Durham. — School.—Bishop Auckland Grammar School, for C.C. F. Willey, F.R.I.B.A., architect to the E.C., 34, Old Elvet, Durham.

Evesham.—Painting.—Interiors of 95 houses, for T.C. J. Abbott, B.S. Dep. £1.

Norton. — Houses. — 24 non-parlour type, in Beverley-rd., for U.D.C. M. Appelbee, clerk. Dep. £2 2s.

Nottingham.—Conveniences.—In Colwick Wood Park, for T.C. T. Wallis Gordon, City E. Dep. £1.

Southwick.—Houses.—6 self-contained flats and 6 houses at Gardner-rd. extension, Fishergate, for U.D.C. Geo. W. Warr. Dep. £1 1s.

***Stepney.**—Erection.—Of dwellings on Branch-rd. site, for B.C. Wm. McCarthy, T.C., Raine-st., E.1. Dep. £5.

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Tanfield.—Alterations.—Burnopfield Leazes Council school. Architect to E.C., 34, Old Elvet, Durham.

Wallingford.—Dwellings.—11, at Goldsmith's-lane, for T.C. Francis R. Hedges, T.C. Dep. £1 1s.

Washington.—Alterations.—At Biddick school, for Durham County E.C. F. Willey, architect, 34, Old Elvet, Durham.

Westbury-on-Trym, near Bristol. — Erection. — Hospital at Brenty Colony, for Management. E. R. Abbott, Hon. Sec., 13, Victoria-st., London, S.W.1. Dep. £1 1s.

SEPTEMBER 22.

***Andover.** — Erection. — Of municipal offices, museum, public convenience and caretaker's accommodation in Bridge-st., for Corporation. G. Henshaw, Westminster Bank-chams., Andover. Dep. £1 1s.

Bromley.—Internal Decoration.—And external painting to chapel and external painting to lodge at Bromley Hill cemetery, also redecoration of part of interior of lodge at London-rd. cemetery, for T.C. B.E. Dep. £1 1s.

Ealing.—Extension.—To the vestry hall, Ranelagh-rd., for T.C. F. J. Forty, Deputy B.E. Dep. £1 1s.

Glamorgan.—Building.—Hendre Council school, Caerphilly, removal of temporary building from Troedrhiwfuwch and re-erection at Hendre school and extension of boys' and girls' offices, and clinic at Pontardawe infants' school, for C.C. H. Rowland, Clerk of County Council, Cardiff.

Harlech.—Cottage.—For Merioneth Smallholdings Committee. Norman L. Jones, County Architect, County Offices, Dolgelley.

***Northampton.** — Erection. — Of public baths, Campbell-square, for C.B. J. C. Prestwich & Sons, architects, Bradshawgate-chambs., Leigh, Lancs. Dep. £5 5s.

Rowley Regis.—Supplying.—And fixing four wood and glazed screens or partitions at Blackheath Council school, Powke-lane, for T.C. F. T. Wilson, secretary of E.C.

Sandwich. — Erection. — Of three houses in Laburnum-av., for T.C. Town Clerk. Dep. £2.

***Staffordshire.**—Alterations.—And additions to grammar school, Rugeley, for C.C. F. A. Hughes. Dep. £5 5s.

SEPTEMBER 24.

Blyth.—Houses.—26, on various sites, for R.D.C. A. A. Hipperson, Reydon, Southwold. Dep. £1 1s.

***Edmonton.**—Erection.—Of detached handicraft room in playground of Silver-st. school, N.18, for E.C. E. O. Taylor, Brettenham-rd., N.18. Dep. 10s.

Edmonton.—Reconstruction.—Of lavatories at Eldon-rd. school, N.9, for E.C. E. O. Taylor, Director and Secretary, Brettenham-rd., Edmonton, N.18. Dep. 10s.

Godalming.—Repair.—And renovation works, and internal and external decoration to Council's sewage pumping station at Unstead, and heating system to same premises, for T.C. G. B. Hartfree, B.S. Dep. £1 1s. each.

Hadleigh.—Instruction Centre.—At Council school, for West Suffolk E.C. County Architect, 56, Westgate-st., Bury St. Edmunds. Dep. £1 1s.

***Harmondsworth.**—Cottages.—36, at The Moor, for Yiewsley and West Drayton U.D.C. W. T. Morgan, E. and S. Dep. £2 2s.

Ilford.—Extension.—980 lin. yds. of oak pale fencing on boundaries of Barkingside cemetery, for T.C. B.E. Dep. £1.

Kensington. — Repainting. — Of street lamps columns and lanterns throughout the borough, for B.C. B.E.

Leeds.—Painting.—Exterior only, Market Hall, for T.C. Fred Broadbent, F.R.I.B.A., architect.

Manchester.—Rebuilding.—Of retaining wall and gables of buildings between railway bridge (Ashburys Station) at Huddleston-st., for T.C. City E. Dep. £3 3s.

Oldham.—Tiling.—Of floors and walls in connection with extension to Public Assistance Offices, Rochdale-rd., for T.C. B.E. and S.

Ossett.—Repainting.—And redecorating of portion of interior of town hall, offices and public hall, for T.C. B.S.

Reading.—Library.—Public library at junction of Northumberland-av. and Cressingham-rd. on Whitley housing estate, for C.B. Housing Architect. Dep. £2 2s.

Yorkshire.—Various Works.—At Batley Grammar School and Wath Grammar School, for West Riding C.C. Education Officer, County Hall, Wakefield.

SEPTEMBER 25.

Belfast.—Nurses' Home.—At Royal Victoria Hospital. W. H. Stephens & Sons, chartered surveyors, 13, Donegall-sq. North. Dep. £5 5s.

Clifton (York).—Building.—New occupational workshop for male patients at hospital, and for demolition of certain existing outbuildings, for Visiting Committee. H. H. Dryland, Clerk to Visiting Committee, North Riding Mental Hospital, York. Dep. £1 1s.

Peterborough.—Houses.—33, on Park-lane estate, west side, off Padholme-rd., for T.C. W. H. A. Court, City E. and S. Dep. £2 2s.

***Walsingham.**—Houses.—40, at Fakenham, Norfolk, for R.D.C. G. W. Little, Bridge-st., Fakenham, Norfok. Dep. £2 2s.

***Waltham Abbey.** — Extensions. — To Isolation Hospital in Honey-lane, for Waltham Joint Hospital Board. R. A. Gale, Clerk. Dep. £5 5s.

SEPTEMBER 26.

Blaenau Festiniog.—Clinic.—For King Edward VII. Welsh National Memorial Association. R. C. Jones, L.R.I.B.A., Blaenau Festiniog. Dep. £2 2s.

Liverpool.—Erection.—Of 180 tenement buildings and 2 shops on Myrtle-st. site, for Corporation. Director of Housing, Municipal Annexe, Dale-st. Dep. £2 2s.

London.—Painting.—92 maisonettes, Mount Pleasant-hill, and 5 blocks of flats at Southwold-rd., for Hackney B.C. P. Holt, B.E. and S. Dep. £1 1s. each.

Newcastle-on-Tyne.—Alterations.—For conversion into lecture-room at City Hospital for Infectious Diseases, Walkergate, for T.C. City Estate and Property Surveyor.

Northallerton.—Houses.—44, at Vicar's Croft, for U.D.C. S. Dep. £1 1s.

Sturminster.—Painting.—And repair works, of fire station, Sturminster Newton, and providing and laying reinforced concrete raft foundations, also repairing cracks in outer walls, at 10, Child Okeford, for R.D.C. J. S. Ackerman, S.

SEPTEMBER 27.

Aberystwyth.—Houses.—38, at Penparke and block of 3 self-contained flats in Portland-rd., for T.C. Llewelyn Jones, B.S., Corporation Offices, Park-av. Dep. £5.

Coulsdon.—Erection.—Of 4 pairs of cottages and extension of sewer work to existing drains at Netherne mental hospital, for Surrey C.C. F. J. Hodgson, 201, High-st., Guildford. Dep. £1 1s.

SEPTEMBER 29.

Harrow.—Car Park.—And attendant's lodge at swimming bath at Christchurch-av., Wealdstone, for U.D.C. J. Percy Bennetts, S.

OCTOBER 1.

Brighton. — Airport.—Preparation of landing ground, seeding and diversion of streams and other incidental work, at airport, for Brighton, Hove and Worthing Municipal Airport. Stavers H. Tiltman, L.R.I.B.A., architect, 42, Middle-st. Dep. £5 5s.

Dublin.—Houses.—560, at North Lotts housing area, for T.C. City Treasurer, Exchange-bldgs., Lord Edward-st. Dep. £5 5s.

OCTOBER 2.

Liverpool.—House.—At Llanforda, near Oswestry, for T.C. The Resident Engineer, Llanforda Filters, Oswestry. Dep. £1 1s.

✱**Richmond.**—Erection.—Of 70 houses, for T.C. B.E., Hotham House, Heron-court, Richmond, Surrey. Dep. £2 2s.

✱**Shoreditch.**—Reconstruction.—Of floor at Pitfield-st. Baths, for B.C. B.S., Old-st., E.C.1. Dep. £2 2s.

✱**Southend.**—Demolition.—Of cottage, stables, outbuildings and stores at rear of 93, London-rd., for Corporation. R. H. Dyer, B.E. and S. Dep. £1.

✱**Swansea.**—Erection.—Of branch public library at Oystermouth, for C.B. Borough Architect, 3, Prospect-pl. Dep. £2.

✱**Swansea.** — Erection. — Of nursery school at Nelson-terr., for E.C. Borough Architect, 3, Prospect-pl. Dep. £2.

OCTOBER 3.

Castle Donnington.—Houses.—4, at Station-rd., for R.D.C. Arthur Eaton & Son, architects, Derby. Dep. £3 3s.

Hertfordshire.—Erection.—Of new County Council school on Osidge estate, Chase-side, East Barnet Valley, for C.C. A. E. Prescott, C.S., Hatfield. Dep. £2 2s.

OCTOBER 4.

Kington.—Cottages.—6 in 3 pairs at Park-av., for U.D.C. John R. Swindells, clerk, 2, High-st. Dep. £1 1s.

✱**Manchester.** — Erection. — Yew Tree Municipal senior school, Wythenshawe, for E.C. Surveyor's Dept., Deansgate, Manchester. Dep. £2 2s.

OCTOBER 8.

✱**Daventry.**—Houses.—25, at Byfield, and construction of roads and sewers, for R.D.C. J. B. Williams, The Moot Hall. Dep. £1 1s.

OCTOBER 15.

✱**York.**—Demolition.—And removal of prison buildings and enclosing wall on York Castle site, for T.C. F. W. Spurr, City Engineer. Dep. £1 1s.

MATERIALS, etc.

SEPTEMBER 17.

Audenshaw.—Cold Asphalt.—For U.D.C. S.

Ruislip-Northwood.—Slabs.—Granolithic paving slabs, for U.D.C. E. and S.

SEPTEMBER 19.

Workington.—Pipes.—5,828 lin. yds. of 21-in. internal dia. concrete lined spun cast-iron pipes, hatch boxes, sluice valves, air valves, etc., for T.C. J. Penman, B.E. and S.

SEPTEMBER 21.

Worthing.—Timber.—For sea defence purposes, for T.C. B.E. and S.

SEPTEMBER 24.

Batley.—Bitumen.—Supplying and laying 140 tons of filled bitumen, for T.C. B.E.

Burgess Hill.—Granite.—For U.D.C. W. E. Hancock, S.

Litherland.—Pitching.—Red shale and stone pitching, for U.D.C. Geo. Ponsford, E. and S.

Slough.—Pipes.—2,400 yds. 3-in. and 4-in. C.I. pipes, for U.D.C. Water E.

SEPTEMBER 25.

Lindsey, Lincs.—Cement.—For C.C. Arthur G. Bradshaw, C.S., County Offices, Newland, Lincoln.

SEPTEMBER 26.

Chelmsford.—Maintenance Materials.—For T.C. V. J. Willis, B.E. and S.

SEPTEMBER 27.

Wilts.—Road Materials, etc.—For C.C. H. S. Ganderton, C.S., Trowbridge.

NO DATE.

Lancashire. — Tarmacadam. — For C.C. P. Schofield, C.S., Preston.

ENGINEERING, IRON AND STEEL.

SEPTEMBER 17.

Woolwich.—Bridge.—To carry South Circular-rd. over Southern Railway (Dartford Loop Line), at Hornpark-lane, for L.C.C. Chief Engineer, County Hall, Westminster Bridge, S.E.1. Dep. £5 (cheque only).

SEPTEMBER 18.

Sheffield.—Building.—Natural draught cooling tower or towers at Blackburn Meadowe generating station; civil and constructional engineering work, including extensions to buildings, and civil and constructional engineering work, including the demolition and reconstruction of existing boiler-house structures at Neepsend generating station, for T.C. E. Morgan, General Manager. Dep. £3 3s. each.

Woking.—Open-air Swimming Pool.—In Constitution Hill recreation ground, for U.D.C. G. F. Hawkins, E. and S. Dep. £5 5s.

SEPTEMBER 19.

Eaton Socon.—Widening.—Of George bridge, for Bedfordshire C.C. C.S., Shire Hall, Bedford.

Riseley.—Reconstruction.—Of bridge, for Bedfordshire C.C. C.S., Shire Hall, Bedford.

SEPTEMBER 21.

Newport.—Extension.—Drainage and fencing on land adjoining Coronation Park, for C.B. B.E. Dep. £5.

SEPTEMBER 24

Egypt.—Remodelling.—Assiut barrage and Ibrahimia head regulator, for Ministry of Public Works of the Egyptian Government. Coode, Wilson, Mitchell & Vaughan-Lee, consulting engineers, 9, Victoria-st., London, S.W.1.

Hull.—Bridge.—Over Foredyke stream, Montrose-st., for T.C. H. Hamer, City E. Dep. £2.

Margate.—Reservoir.—Covered concrete service reservoir at Fleete, near Margate, for T.C. E. A. Borg, B.E., 40, Grosvenor-pl. Dep. £5 5s.

Mere and Tisbury.—Laying.—Of four miles of small asbestos-cement and galvanised steel water mains and a small concrete reservoir for R.D.C. Arthur J. Martin, engineer, 106, St. George-sq., Westminster, S.W.1. Dep. £3 3s.

SEPTEMBER 25.

Kington.—Pulling Down.—And rebuilding Arrow Bridge, over River Arrow, for Herefordshire C.C. C.S., High Town, Hereford. Dep. £5 5s.

SEPTEMBER 27.

Yeovil.—Water Supply.—At Tintinhull, for R.D.C. C. A. Wilson, S., 28, Kingston, Yeovil. Dep. £2 2s.

ROAD, SEWERAGE AND WATER WORKS.

SEPTEMBER 17.

Dunstable.—Making-up.—Of Olma-rd. (remainder), about 150 ft. in length, for T.C. W. F. Wilkins, B.S. Dep. £1 1s.

Edmonton.—Street Works.—In Church-lane (part) and St. Joseph's-rd. (part), for U.D.C. E. J. Willis, E. and S. Dep. £2 2s.

Largs.—Widening.—Of main shore road at junction near Haylie-gdns., for Ayr C.C. G. S. Barry, C.S., County Buildings, Ayr. Dep. £2 2s.

Peterborough.—Footpaths.—Construction of gravel footpaths on housing estates, for T.C. City Engineer's Office, Town Hall, Peterborough. Dep. £1 1s.

Swadlincote. — Laying. — And jointing of about 5,600 yds. of steel tube and stoneware pipe sewers, with manholes and storm overflow chambers, from the existing sewage farm at Council-rd. to Midland-rd., for U.D.C. Willcox, Raikes & Marshall, engineers, 33, Great Charles-st., Birmingham. Dep. £10 10s.

SEPTEMBER 18.

Caterham and Warlingham. — Making-up. — Of Commonwealth-rd. and Markville-gdns., Caterham, for U.D.C. E. and S., Council Offices, Caterham Valley. Dep. £2 2s.

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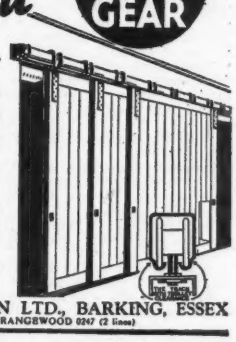

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✱**Leek.**—Construction.—Of streets and sewers in connection with Haregate housing scheme, for U.D.C. Chairman of Housing Scheme.

Manchester.—Kerbing.—Sewering, draining, kerbing, ballasting and formation of builder's road on westerly side of Sharston-rd., Northenden, for T.C. F. E. Warbreck Howell, Town Clerk. Dep. £2 2s.

Southport.—Making-up.—Of Carisbrooke-drive, for T.C. A. E. Jackson, B.E. Dep. £2 2s.

Sutton.—Making-up.—Of various roads, for Sutton and Cheam U.D.C. N. H. Michell, S. Dep. £1 1s.

SEPTEMBER 19.

Great Crosby.—Road Works.—At Riverslea-rd., Blundellsands, for U.D.C. Joseph A. Wright, S.

Leeds.—Formation.—Pitching, etc., of roads on Gipton housing estate, Area No. 3, for Corporation. Town Clerk, Room 57, Civic Hall. Dep. £2.

Luton. — Construction.—Of Kingsway surface water sewer, for T.C. J. W. Tomlinson, B.E. and S., 12, Upper George-st. Dep. £2 2s.

Sutton and Cheam.—Soil Sewers.—For U.D.C. N. H. Michell, S., Municipal Offices, Sutton. Dep. £3 3s.

Workington.—Pipes.—5,828 lin. yds. of 21 in. internal dia. lap welded steel pipes coated internally and externally with bitumen, for T.C. J. Penman, B.E. and S.

SEPTEMBER 20.

New Sarum.—Asphalting.—In London-rd. between Bourne Hill and Winchester-st., for T.C. H. V. Overfield, City E. Dep. £2 2s.

St. Helens.—Sewering.—And sewage disposal in Sutton Manor district, for T.C. A. P. Statham, Borough and Water Engineer.

Wembley.—Making-up.—Of various roads, for U.D.C. Cecil S. Trapp, E. and S. Dep. £1 1s.

SEPTEMBER 21.

Birtley.—Levelling.—And laying-out and preparation of playing field and grounds at East Council school, for Durham E.C. Education Committee, 34, Old Elvet, Durham.

Spennymoor.—Playing Field.—Drainage, levelling, laying-out and preparation of additional playing field at Spennymoor Alderman Wraith secondary school, for Durham C.C. F. Willey, F.R.I.B.A., architect to E.C., 34, Old Elvet, Durham.

SEPTEMBER 22.

Durham.—Making-up.—Of 1-17, Nevilledale-terr., for T.C. J. W. Green, City E. and S. Dep. £1 1s.

SEPTEMBER 24.

Batley.—Surfacing.—Supplying and laying 10,000 sup. yds. of asphalt surfacing, for T.C. B.E.

✱**Harmondsworth.**—Roads.—And sewers in connection with erection of cottages at the Moor, for Yiewsley and West Drayton U.D.C. W. T. Morgan, E. and S. Dep. £2 2s.

Scarborough.—Kerbing.—Laying of concrete foundation, kerbing, etc., in Filey-rd., for T.C. J. Paton Watson, B.E.

SEPTEMBER 25.

Barnet.—Making-up.—Of Hillside-gardens, for U.D.C. S.

Isle of Ely.—Construction.—Of approx. 800 lin yds. of concrete road, for C.C. C.S., County Hall, March. Dep. £5.

SEPTEMBER 27.

Cheltenham.—Sewer.—Relief sewer between High-st., intercepting sewer and River Chelt, for T.C. G. Gould Marsland, B.E. Dep. £1 1s.

Harpenden. — Making-up. — Amenbury-lane and Kirkdale-rd., for U.D.C. W. H. Johnson, S., Harpenden Hall.

SEPTEMBER 28.

Ashby Woulds.—Drainage.—Of Spring Cottage Area, for U.D.C. Pick, Everard, Keay & Gimson, engineers, 6, Millstone-lane, Leicester. Dep. £2 2s.

SEPTEMBER 29.

Scarborough.—Sewer.—In Eastborough and Newborough, from Sandside to St. Nicholas-st., for T.C. J. Paton Watson, Borough and Water Engineer. Dep. £2.

Public Appointments.

SEPTEMBER 19.

Ipswich.—Architectural Assistant (Temporary). —For East Suffolk C.C. County Architect.

SEPTEMBER 20.

✱**Bolton.** — Architectural Assistant. — For C.B. H. B. Ashford, T.C., Town Hall.

London.—Junior Technical Examiner.—Secretary, Civil Service Commission, Burlington-gdns., W.1.

✱**Newcastle.**—Clerk of Works (Temp.).—For Corporation. G. C. Till, Moreton House, Wolstanton, Staffs.

SEPTEMBER 22.

London, S.W. — Civilian Garrison Engineers (Temp.).—For establishment for engineer services at Army Stations in Great Britain and Northern Ireland, for War Office. Under-Secretary of State (C.5), War Office, London, S.W.1.

✱**Worthing.**—Town Planning Assistant—For Corporation. J. Kennedy Allerton, T.C.

SEPTEMBER 28.

✱**Cardiff.**—Assistant Lecturer in Welsh School of Architecture.—For E.C. W. J. Williams, City Hall.

SEPTEMBER 30.

✱**Bolton.**—Assistant to Architect of Education Authority.—For C.B. Director of Education, Nelson-sq.

OCTOBER 1.

✱**Nottingham.**—Quantity Surveyor.—For T.C T. Wallis Gordon, City E. and S.

OCTOBER 2.

✱**Northallerton.**—Town Planning Officer.—For North Riding C.C. H. G. Thornley, clerk.

CURRENT & PROPOSED BUILDING WORK*

Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; B. of E. for Board of Education; M.W.B. for Metropolitan Water Board; B.S. for Borough Surveyor; B.E. for Borough Engineer; D.S. for District Surveyor; C. for Clerk; T.C. for Town Clerk; C.E. for County Engineer; C.S. for County Surveyor; S. for Surveyor; E. for Engineer.

Alnwch (North Wales).—Rev. J. E. Hemphill proposes Church of Our Lady and St. Winefride. Dr. G. Rinvoleuri, of Conway, architect.

Alnwick.—U.D.C. adopted slum-clearance scheme involving displacement of 366 people. Eighty new houses to be erected on St. Thomas Close Field site.

Alnwick.—U.D.C. to consider at next meeting scheme for improvements at Northumberland Hall at £1,600.

Andover.—R.D.C. approved:—28 houses at Thruxton, 2 at Penton Mewsey and 6 at Hurstbourne Tarrant. Tenders to be invited shortly.

Bath.—Health Committee been requested to consider question of public convenience in vicinity of proposed new cemetery at Haycombe Farm.

Blackpool.—C.B. resolved that application by B.S. from Gorst & Crabtree for permission to erect a non-residential club in Park-rd. be acceded to.—B.S. to obtain tenders for brick palisade walls fronting certain roads on St. John's housing estate.—Plans passed:—26 houses, Newhouse-rd. and Barclay-av., A. & G. R. Fletcher; 28 houses, Faringdon-av., etc., Blackpool Plumbing Co.; bank and house, Westcliffe-drive and Annesley-av., Williams Deacons Bank, Ltd.; restaurant and house, 12, Red Bank-rd., Mrs. Middlehurst; 148 houses, 10 garages, Acregate, etc., Hitchen & Bairstow; 7 houses, 6 garages, Stony Hill-av. and Albany-av., G. Woodhead; 18 houses, 10 garages, Low Moor-rd., etc., W. Houghton; shops, house, offices, garages, etc., Preston New-rd. and Newhouse-rd., H. Best; shops, private hotels, etc., Queen's-drive and Red Bank-rd., Mrs. M. V. Hilton; warehouse, garage, etc., Cecil-st., W. B. Anderson & Sons, Ltd.; sub-stations, Devonshire-rd., Stanley-rd., Marton, Lichfield-rd., Fleetwood-rd., Corporation.

Blaydon-on-Tyne.—Site secured, it is hoped to proceed with elementary school at Blaydon. Accommodation will be provided for 280 children. Architect, Paul J. Stienlet, 5, Saville-chams., Newcastle-on-Tyne.

Bolton.—Catholic Authorities of St. Columba, Ripley-st., Tonge Moor, proposes school for 200 children. Harold Greenhalgh, 15, Mawdesley-st., architect.

Canterbury.—Plans for spectators' grandstand on Waverley F.C. ground at Wincheap-grove have been passed by T.C.

Carlisle.—Billiards hall to be erected at Grinsdale and tenders to be obtained from R. O. Cowan, 54, West Tower-st.

Cheadle (Ches.).—J. L. Edwards, architect, 1, Ridgefield, King-st., Manchester, plan 5 shops and 325 houses on Bolshaw-rd. and Wilmslow-rd., for the Outwood Hall Estate.

Chester-le-Street.—Slum-clearance scheme involving demolition of 866 houses and erection of 910 new ones been drawn up by R.D.C. Cost £295,880.

Coleraine.—Guardians approved improvements to fever hospital at £3,700.

Consett.—Sanction received by U.D.C. to proceed with slum-clearance scheme involving demolition of 80 slum houses. Plans for new houses by T. Hutton, S.

Crewe.—T.C. considering schemes costing between £29,000 and £51,000 for swimming baths.

Devon.—County E.C. approved tenders amounting to about £25,000 for three new schools, including one of £8,820 for a junior school at Paignton to accommodate 400 scholars.

Dorridge, Warwick.—Plans been prepared by A. J. Crush, F.R.I.B.A., Edgbaston, Birmingham, for Church of St. George, to replace mission chapel burned down.

Felling-on-Tyne.—C. W. Hall, S. to U.D.C., to prepare plans for public library, back of Neville-st., and also branch library at Bill Quay.

Gateshead.—F. H. Patterson, B.E., prepared plans for swimming baths for T.C.

Gatley (Ches.).—Cheshire C.C. propose primary school at Hawthorne-rd. Plans by County Architect, F. Anstead Browne, F.R.I.B.A., Chester.

Guildford.—Extension of Woodbridge isolation hospital is proposed at cost of £6,500.

Halstead.—U.D.C. propose 28 houses at King's Head, for which tenders are to be invited.

Haraton.—Parish Council requested Chester-le-Street R.D.C. to consider scheme for building open-air swimming pool.

Hoddesdon.—U.D.C. to purchase land at Rye-pk., from Homemakers, Ltd., and S. has been instructed to prepare scheme for about 80 houses.

Isle of Man.—In a scheme to reconstruct Majestic Lido Hotel, at Onchan, plans for which have been prepared by A. E. Lancashire, architect, of Preston, provision is made for ballroom, stage and screen. Cost of the scheme is over £200,000.

Leicester.—City Mental Hospital Committee are to prepare scheme for extension of male division at Humberstone hospital.

Liverpool.—S. R. Kelly, 24, Albany. Liverpool, proposes 10 shops and houses, public service garage and petrol station and 24 lock-up garages, corner of Queen's-drive and Mill-lane, West Derby.—D. Roberts & Co., Idanfryn, Dunbabin-rd., Wavertree, proposes developing site off Broad-green-rd., Broad-green, for about 400 houses.—Society of Christian Brothers De la Salle to extend central school in Buckfield-rd. Pugin & Purcell, architects, 15, Moorfields. Estimated cost £10,000. Contracts not placed.—Plans passed: 42 houses, Fairacre-rd., Gray & Evans, for Town Estates (Liverpool), Ltd.

Liversedge.—S. Webster & Sons, Ltd., brewers, Halifax, to carry out structural alterations to "Old Hotel" in Child-lane. Plans approved and tenders to be invited.

London (Lewisham).—B.C. approved: Wates, Streatham, Ltd., to form or lay out street out of south side of Winn-rd., Lee; J. Everington, houses on Hall Park estate, Catford; Hugh Macintosh, to lay out streets, Honor Oak-rd., Forest Hill (Tewkesbury Lodge estate); L. A. Culliford, Bromley-rd. and Old Bromley-rd., 31 houses.

Manchester.—W. J. Brookes & Son, Ltd., Old Trafford, propose biscuit factory on Sharston-rd., Northenden. Plans by Frederick Briggs, engineer, 136, Eccles New-rd., Pendleton, Salford.—Royal Manchester Children's Hospital, Pendlebury, propose convalescent home at Pendlebury. Plans by J. W. Beaumont & Sons, architects, 24, Brazennose-st. Accommodation for 40 beds.—Till & Kennedy, Ltd., hardware merchants, 41, George-st., Hulme, propose additions to works, Bedale-st. and George-st., Hulme. Architect, E. Dalby, Sparke & Stephens, Ltd., Egerton-rd., Cholton-cum-Hardy. No contracts placed.

Mansfield.—Sherwood House, large stone-built residence on Nottingham-rd., been acquired by Freemasons as site for Masonic Temple.

Middlesbrough.—B.E. prepared plans for extensions to Corporation maternity home in Park-rd.

Newcastle.—Dixon & Bell, Pearl-bldgs., Northumberland-st., architects for garage at Jesmond.—Major J. W. Steele, City E., prepared scheme for reconstructing refuse disposal works at Scotswood-rd., Benwell.—City Council approved slum-clearance schemes and building of 396 houses. R. Roberts, 18, Cloth-market, Newcastle, Housing Architect.

North Walsham.—Plans have been prepared by E. Bower Norris, F.R.I.B.A., for new church to cost £3,000.

Northallerton.—U.D.C. obtaining tenders for 44 houses, Vicars Croft. Plans by S., 127, High-st.

Redditch.—U.D.C. to erect 100 houses on Salters-lane housing estate, subject to consent of M.H.

Rochdale.—T.C. approved:—152 houses in Milnrow-rd. for Proprietary Housing Investments, Ltd., and for nursery school in South-st.

Sheffield.—Flats to be built in Duke-st., Park. Edgar Gardham, A.R.I.B.A., is architect for building.

Spenborough. — U.D.C. approved 42 houses, Woodlands-rd., Gomersal, for Kilbride & Wilson.

Stanhope.—Durham C.C. to build school at £7,000. F. Willey, 34, Old Elvet, Durham, prepared plans.

Stanley.—U.D.C. to build 76 houses, Outward Hill estate, and 50, Moor House estate. A. Routledge, S.

Stockport.—T. A. Fitton & Sons, architects, 19a, Corporation-st., Manchester, plan country club and "lido" on Buxton-rd., Hazel Grove, for the Orange Café proprietors.

Stockton-on-Tees.—Scheme for hotel in Wolviston-rd. being prepared by W. & T. R. Milburn, architects and surveyors, 17, Fawcett-st., Sunderland.

Stretford.—B.S. prepared plans for child welfare centre and school clinic and library, Trafford-pk., estimated to cost £2,400.—Council resolved that scheme for library at Stretford be proceeded with so soon as progress on work of clearing site permits, and architect be instructed to prepare particulars for purpose of inviting tenders.—Plans passed:—Transformer house, off Park-rd., D. Anderson & Son, Ltd.; extension, Trafford Park-rd., Lancs. Dynamo & Crypto Co., Ltd.; office, Stretford memorial hospital, Board of Management.

Sunderland.—Priests of St. Benets Redemptorist Monastery, Monkwearmouth, secured portion of land on Mere Knolles estate, Fulwell, for R.C. school and chapel.—S. J. Stephenson & Gillis, 2, Saville-pl., Newcastle, prepared plans for extensions to factory, 27, Low-row. Plans approved, but no contracts let.

Swinton.—Valentine & Mather, Ltd., Ellesmere-st., propose development of Sunnyside estate, Ellesmere-st., by 103 semi-detached villas. Plans prepared by own staff.

Wakefield.—J. C. Waterhouse & Co., of Henry-st., to erect new offices. Plans by J. P. Firth, architect. Tenders to be invited.

Wirksworth.—U.D.C. are to invite tenders for 28 houses at Gorsey Bank.

York.—Members of Fulford Golf Club propose golf clubhouse on golf links at Heslington-lane, Heslington. Plans by Penty & Thompson, architects, Coney-st. Contracts not yet placed.

* See also List of Contracts open.

*** **In these lists every care is taken to ensure that information given is accurate and up to date, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced.**

NEW PUBLIC WORKS

Bridgwater.

The Ministry of Health has held a public inquiry into Bridgwater Town Council's application to borrow £21,900 for the purchase of lands for the purpose of a new market and public abbatoir.

Daventry.

Tenders are invited by R.D.C. for the erection of 25 houses at Byfield, and construction of road and sewers. Particulars from Mr. J. B. Williams, The Moot Hall, Daventry. Deposit £1 1s. Tenders by October 8.

Manchester.

T.C. invite tenders for the erection of Yew Tree Municipal Senior School, Wythenshawe. Particulars from the Surveyor's Department, Education Offices, Deansgate. Deposit £2 2s. Tenders by October 4.

Northampton.

Builders desiring to tender for the proposed public baths, Campbell-square, are invited to send their names to the architects, Messrs. J. C. Prestwich and Sons, Bradshawgate-chambers, Leigh, Lancs, by September 22.

Swansea.

The C.B. invite tenders for the erection of (*a*) a nursery school at Nelson-terrace, and (*b*) a branch public library at Oystermouth. Drawings (deposit of £2 2s. each job) from Borough Architect, 3, Prospect-place, Swansea. Tenders by October 2.

Walsingham.

R.D.C. invite tenders for the erection of 40 houses, together with necessary roads, at Fakenham, Norfolk. Particulars from the Housing Officer, Mr. G. W. Little, Council Offices, Fakenham. Deposit £2 2s. Tenders by September 25.

NEW CINEMAS

COLERAINE.—Coleraine Picture Palace Co., Ltd., propose to erect a new cinema to seat 850 in Railway-road, Coleraine, Ireland, to replace the existing picture-house. Plans have been prepared by Mr. J. S. Kennedy.

CORBY.—The Odeon Circuit, Cornhill-house, Bennett's-hill, Birmingham, have entered into an agreement with Messrs. Stewarts and Lloyds, Ltd., of Corby, to erect a cinema to seat 1,500 at Corby. Plans are to be prepared.

LONDONDERRY.—A contract for the erection of the "Strand" Theatre has been placed with Messrs. R. Colhoun, Strand-road, Londonderry. The house will seat 1,650, and is for Mr. W. James.

NORWICH.—A contract for clearing the site of the Theatre Royal, for Mr. Jack Gladwin, has been placed with Mr. Harry Pointer, of Norwich. A building contract is expected shortly to be placed. Plans have been prepared by Mr. W. H. Barton, L.R.I.B.A., 35, Haymarket, S.W.1.

PICCADILLY.—A company, Monseigneur News Theatre Co., has been formed to convert part of the Monseigneur Restaurant, on the Piccadilly side, into a news-reel theatre.

SWAFFHAM.—Mr. J. Owen Bond, F.R.I.B.A., 26, Tombland, Norwich, is the architect for erection of a cinema in London-street, for the Swaffham Cinema Co., Ltd., Market-place. Accommodation will be for 570 persons.

THROCKLEY.—A contract for the erection of the Lyric Cinema, with shops and a public hall, has been placed with Messrs. Walter Wilson (Gateshead), Ltd., Cemetery-road, Gateshead-on-Tyne, and not as stated in our last issue. Plans for the building, for Lyric Cinema (Throckley), Ltd., have been prepared by Messrs. P. L. Browne and Son, Pearl-buildings, Newcastle-upon-Tyne.

WIGSTON.—A contract for the erection of the cinema in Long-street, Wigston, Leicestershire, has been placed with Messrs. Chitham and Co., Ltd., Welford-road, Leicester. Plans are by Mr. Frank H. Smith, 6, Pocklington-walk, Leicester.

PRICES CURRENT OF MATERIALS.*

Owing to the exceptional circumstances which prevail at the present time prices of materials should be confirmed by inquiry

PRINCIPAL CHANGES OF THE WEEK.—Some types of Bricks decrease in price, by amounts varying from £1 to 5s. per 1,000. 2 in. York Stone flags decrease by 1s. to 7s. 6d.

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	£ s. d.		£ s. d.
"Phorpres"	2 11 3	Flettons, B'll'n'se Best Blue	3 6 3
Flettons at King's Cross	2 11 3	Pressed Staffs	8 5 0
Do., grooved for Plaster	2 13 3	Do. Bullnose	8 15 0
		Blue Wire Cuts	7 0 0

White Midhurst Facing Bricks (delivered London site) 5 0 0
"Phorpres" whites (do.) 3 17 3
"Phorpres" Rustic Facing Bricks, delivered Central London per 1,000 3 12 3
Best Stourbridge Fire Brick:—
2½ in. 7 15 0 3 in. 8 15 0

GLAZED BRICKS—

Best White Ivory and Salt Glazed Stretcher	21 0 0	D'ble Str'tch'rs	29 10 0
		D'ble Headers	26 10 0
		One side and two Ends	30 10 0
Headers	20 10 0	Two sides and one End	31 10 0
Quoins, Bullnose and 4½ in. Flats	27 10 0	Splays and Squints	28 0 0

Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours. Hard Glaze, £5 10s. extra over white.

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2½″ „ „	1 8	4″ „ „	2 4

CRANHAM TERRA COTTA.

2″ per yd. sup.	3 0	3″ per yd. sup.	3 8
2½″ „ „	3 6	4″ „ „	4 7

HEMPSTEAD—KEYED TWO SIDES.

12″ × 9″ × 2″	2 3	12″ × 9″ × 3″	2 9
12″ × 9″ × 2½″	2 6	12″ × 9″ × 4″	3 6

Per yard super d/d. Free on site, London.

	s. d.	
Thames Ballast	7 3	per yd. delivered 2 miles radius Paddington.
Pit Ballast	6 3	„ „
Pit Sand	7 9	„ „
Washed Sand	8 3	„ „
¾ in. Shingle	7 3	„ „
¾ in. Broken Brick	11 3	„ „
Pan Breeze	8 3	„ „

CEMENT.

Best British Portland Cement, Standard Specification, delivered London Area in jute sacks (11 to ton), or paper bags (20 to ton) free (non-returnable):—

	£ s. d.
4 ton loads and upwards site Per ton.	1 18 0
1 ton to 4 tons site	2 0 0
Alongside Vauxhall in 80-ton lots	1 14 0
"Ferrocrete" Rapid Hardening Cement:—	
4 ton loads and upwards site	2 4 0
1 ton to 4 tons site	2 6 0
Alongside Vauxhall in 80-ton lots	2 0 0

NOTE.—Jute sacks are charged 1s. 6d. each and credited 1s. 6d. nett if returned in good condition within three months, carriage paid.

"Colorcrete" Nos 1 and 2 Coloured Rapid Hardening Portland Cement in 1 cwt. paper bags free (non-returnable) in 1-ton lots and upwards site	3 6 0
"Snowcrete" White Portland Cement in 1 cwt. paper bags free (non-returnable) 1 ton and upwards site	8 15 0
Super Cement (Waterproof) paper bags free	3 8 0
Roman Cement	6 15 0
Parian Cement	5 15 0
Keene's Cement, White	5 15 0
„ „ Pink	5 10 0

PLASTER.

Plaster, Coarse, Pink	2 12 0
„ „ White	2 17 6
„ Fine	5 0 0
Sirapite, Coarse	3 5 0
„ Finish	3 13 0
Grey Stone Lime	2 2 0
Chalk Lime	2 2 0
Best Ground Blue Lias Lime	1 17 6
Hair per cwt.	2 2 6
Granite Chippings	1 12 0

NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d., if returned in good condition within three months carr. pd.

Stourbridge Fireclay in sacks 37s. 0d. per ton at rly. dep.

STONE.

	s. d.
BATH STONE.—Delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube	2 10
BEER STONE—RANDOM BLOCK—	
Free on rail at Seaton Station, per ft. cube	2 3
Delivered free on rail Nine Elms, S.R. per ft. cube	3 1½
Selected approximate size one way, 1d. per cubic foot extra; selected approximately three sizes or for special work, 3d. per cubic foot extra.	
PORTLAND STONE—	
Brown Whitbed, in random blocks of 20ft. average, delivered in railway trucks at Nine Elms, S. Rly., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube	4 4½
Do. do. delivered on road waggons at above stations, per ft. cube	4 5½
White basebed, 3d. per ft. cube extra.	
NOTE.—1d. per ft. cube extra for every foot over 20 ft. *average*, and ½d. beyond 30 ft.	
HOPTON-WOOD STONE—	
F.O.R. Quarries Wirksworth, Derbyshire, Random blocks from 10ft. and over P.ft.cb.	s. d. 14 0
Sawn two sides	22 6
Sawn, three or four sides	27 9
CHILMARK—RANDOM BLOCK—	
At Nine Elms, per ft. cube	3 11
YORK STONE, BLUE—*Robin Hood Quality.* Delivered at any Goods Station London.	
6 in. sawn two sides landings to sizes (under 30 ft. super) Per ft. super	5 6
6 in. rubbed two sides, ditto „	6 0
3 in. sawn two sides slabs (random sizes) „	2 3½
2 in. to 2½ in. sawn one side slabs (random sizes) „	1 6½
1½ in. to 2 in., ditto „	1 3½
HARD YORK—	
Delivered at any Goods Station, London.	
Scappled random blocks Per ft. cube	6 3
6 in. sawn two sides landing to sizes (under 40 ft. super) Per ft. super	5 1½
6 in. rubbed two sides, ditto „	6 1½
4 in. sawn two sides slabs (random sizes) „	3 1½
3 in. ditto ditto „	2 8
2 in. self-faced random flags Per yd. super	7 6

CAST STONE.

Delivered in London area in full van loads, per ft cube: Plain, 8s. 6d.; Moulded, 9s. 6d.; Cills, 10s. 0d.

SOFT WOOD.

GOOD BUILDING DEAL.

Inches.	Per stan.	Inches.	Per stan.
4 × 11	£23 10	3 × 6	£18 10
4 × 9	22 10	3 × 11	19 10
4 × 8	21 0	2 × 11	19 10
4 × 7	19 0	3 × 9	19 10
3 × 8	18 0	2½ × 9	19 10
3 × 7	18 10	3 × 4½	18 0
2½ × 7	18 10	3 × 4	18 0

PLANED BOARDS.

1 × 11	£22 10	1 × 9	£21 0

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
¾	16/-	1½	26/-
1	17/-	1¼	32/6
1	20/-		

TONGUED AND GROOVED FLOORING.

Inches.	per sq.
1	21/-
1¼	26/-
1½	32/6

MATCHING (BEST).

Inches.	per sq.
¾	16/-
¾	18/6
1	22/6

	s. d.
ins. BATTENS.	
¾ × 2 ..per 100 ft.	2 6
SAWN LATHS.	
Per bundle	2 3

HARD WOOD.

1 INCH AND UP THICK.

Average price for prime quality.

	£ s. d.
Dry Austrian Wainscot, per ft. cube	0 15 0
Dry American and/or Japanese Figured Oak, per ft. cube	0 12 0
Dry American and/or Japanese plain Oak, per ft. cube	0 10 0
Dry sq. edged Honduras Mahogany, per ft. cube	0 14 0
Dry log-cut Honduras Mahogany, per ft. cube	0 16 6
Dry Cuba Mahogany, per ft. cube	1 1 0
Dry Teak, per ft. cube	0 14 0
Dry American Whitewood, per ft. cube	0 10 0
Best Scotch Glue, per cwt.	3 0 0
Liquid Glue, per cwt. 4 7 0 to 5 10 0	

SLATES.

First quality slates from Bangor or Portmadoc, carriage paid in full truck loads to London Rate Station. Per 1,000 actual.

	£ s. d.		£ s. d.
24 by 12	29 15 0	18 by 10	15 12 6
22 by 12	25 0 0	18 by 9	13 15 0
22 by 11	22 10 0	16 by 10	13 10 0
20 by 12	22 0 0	16 by 8	10 7 6
20 by 10	19 7 6		

TILES.

Delivered at London rate stations in full truck loads of not less than 6 tons. Per 1,000 f.o.r. London.

Best machine-made tiles from Broseley or Staffordshire district	£4 7 0
ditto hand-made ditto	5 0 0
Ornamental ditto	5 8 6
Hip and valley tiles (per dozen) Hand-made	0 9 6
Machine-made	0 9 0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION, PER TON—

R.S. Joists, cut and fitted	£11 0 0
Plain Compound Girders	12 0 0
„ „ Stanchions	15 0 0
In Roof Work	18 0 0

MILD STEEL ROUNDS.—To London Station, per ton.

Diameter.	£ s. d.	Diameter.	£ s. d.
½ in.	12 0 0	⅝ in. to ⅞ in.	10 15 0
¾ in.	11 9 0	1 in. to 2½ in.	10 10 0

WROUGHT-IRON TUBES AND FITTINGS—

(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward, if sent from London Stocks.)

	Standard Wrot. Mild Steel Tubes and Tubulars Sizes ⅛in. to 6in.	Genuine Wrot. (Puddled) Iron Tubes and Tubulars Sizes ⅛in. to 6in.	Standard Fittings Sizes ⅛in. to 6in.	Standard Flanges Sizes ⅛in. to 6in.
	%	%	%	%
Gas	65	52½	57½	70
Water	61½	48½	52½	65
Steam	57½	45	47½	60
Galv. gas	52½	40	47½	60
Galv. water	47½	35	42½	55
Galv. steam	42½	30	37½	50

C.I. HALF-ROUND GUTTERS—London Price ex Works

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
3 in.	1/5½	1/1½	4½d.
3½ in.	1/6½	1/3	5½d.
4 in.	1/6½	1/4½	6½d.
4½ in.	1/8	1/6½	9½d.
5 in.	1/10½	1/8½	10d.

O.G. GUTTERS.

3 in.	1/7½	1/5½	7d.
3½ in.	1/9½	1/5½	7½d.
4 in.	1/11	1/6½	8½d.
4½ in.	2/0	1/9½	9½d.
5 in.	2/4½	2/0½	11½d.

RAIN WATER PIPES, &c.

Per yd. in 6 fts.	Pipe.	Bends, stock angles.	Branches, stock angles.
2 in.	2/2½	1/4½	2/0
2½ in.	2/3½	1/6½	2/4½
3 in.	2/9½	1/11	2/10½
3½ in.	3/3½	2/3½	3/3½
4 in.	3/9	2/9	4/0½

Less 20 per cent. trade discount.

Tonnage allowance—4 ton lots, 5 per cent.
2 ton lots, 2½ per cent.

L.C.C. COATED SOIL PIPES—London Prices ex Stock.

	Pipe.	Bends, stock angles.	Branches, stock angles.
	s. d.	s. d.	s. d.
2 in. per yd. in 6 fts.	2 8	1 11	2 3
2½ in. „	3 0	2 1	2 10
3 in. „	3 4	2 3	3 5
3½ in. „	3 7½	2 10	3 11
4 in. „	4 0	3 2	4 6

L.C.C. COATED DRAIN PIPES—London Prices ex Stock.

	Pipe.	Bends, stock angles.	Branches, stock angles.
	s. d.	s. d.	s. d.
3 in. per yd. in 9 ft. lengths	3 0	4 6	7 0
4 in. „ cwt. qr. lbs. 1 1 20	4 9	5 6	8 9
5 in. „ 1 2 22	5 10	9 6	13 6
6 in. „ 2 0 6	6 10	12 0	18 0

Gaskin for jointing 41/- per cwt.

	Per ton in London. £ s. d.		£ s. d.
IRON—			
Common bars	10 0 0	to	10 10 0
Staffordshire Crown Bars—			
Good merchant quality	10 10 0	to	11 0 0
Staffordshire Marked Bars	14 0 0	..	15 0 0
Mild Steel Bars	9 0 0	..	10 0 0
Steel Bars, Ferro-Concrete quality, basis price	8 10 0	..	9 0 0
Hoop iron, basis price	11 0 0	..	12 0 0
„ Galvanised	27 10 0	..	28 10 0
Soft Steel Sheets, Black—			
Ordinary sizes, to 20 g.	11 0 0	..	11 10 0
„ „ „ 24 g.	12 0 0	..	13 0 0
„ „ „ 26 g.	14 0 0	..	15 0 0
Sheets Flat Best Soft Steel, C.R. and C.A. quality—			
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	14 0 0	..	15 0 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.	15 0 0	..	16 0 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g.	17 10 0	..	18 10 0

No. 1 quality £4 per ton extra.

Flat and Galvanised Corrugated Sheets—

Ordinary sizes, 6 ft. to 9 ft. to 20 g.	13 10 0	..	15 0 0
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.	15 10 0	..	16 10 0
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	16 10 0	..	18 0 0
Sheets, Galvanised Flat, Best quality—			
Best Soft Steel Sheets, 6 ft. by 2 ft. to 3 ft. to 20 g. and thicker	14 10 0	..	16 10 0
Best Soft Steel Sheets, 22 g. and 24 g.	15 0 0	..	17 0 0
Best Soft Steel Sheets, 26 g.	16 10 0	..	18 0 0
Cut Nails, 3 in. to 6 in.	15 10 0	..	17 0 0

(Under 3 in. usual trade extras.)

METAL WINDOWS.—Standard sizes, suitable for complete houses, including all fittings, painting two coats, and delivery to job, average price about 1s. 4d. to 1s. 7d. per foot super.

COPPER.

	s. d.
Seamless Copper tubes (basis) per lb.	0 9
Strong sheet „	0 10
Thin „	0 11
Copper nails „	1 0
Copper wire „	0 11

PLUMBERS' BRASS WORK.

Delivered in London

NEW RIVER PATTERN SCREW DOWN BIB COCKS FOR IRON.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
29/-	45/-	76/-	153/-	246/-	510/- per doz.

NEW RIVER PATTERN SCREW DOWN STOP COCKS AND UNIONS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
41/6	62/-	92/-	174/-	300/-	588/- per doz.

* The information given on this page has been specially compiled for THE BUILDER, and is copyright. The aim in this list is to give, as far as possible, the *average* prices of materials, not necessarily the highest or lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information.

PRICES CURRENT OF MATERIALS—(*contd.*).

RIVER PATTERN SCREW DOWN MAIN FERRULES.

½ in.	¾ in.	1 in.	
39/-	60/-	116/6	per doz.

CAPS AND SCREWS.

1¼ in.	1½ in.	2 in.	3 in.	3½ in.	4 in.	
7/6	10/-	14/-	23/-	30/-	42/-	per doz.

DOUBLE NUT BOILER SCREWS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.	
7/6	11/-	17/-	29/-	36/-	63/-	per doz.

BRASS SLEEVES.

1¼ in.	2 in.	3 in.	3½ in.	4 in.	
10/-	12/-	20/-	24/-	31/-	per doz.

NEW RIVER PATTERN CROYDON BALL VALVES S.F.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	
35/-	56/-	98/-	162/-	228/-	per doz.

DRAWN LEAD P. & S. TRAPS WITH GRASS CLEANING SCREW.

	1¼ in.	1½ in.	2 in.	3 in.	
6 lbs. P. traps ..	33/-	41/-	56/-	101/-	per doz.
8 lbs. S. traps ..	35/-	45/-	66/-	126/-	,,

TIN.—English Ingots, 2/5 per lb. SOLDER.—Plumbers' 1/-, Ti n's, 1/2, Blowpipe, 1/3 per lb.

LEAD, &c.

(Delivered in London.)	£	s.	d.
LEAD—Sheet, English, 4 lb. and up	18	0	0
Pipe in coils	16	10	0
Soil pipe	24	10	0
Compo pipe	25	0	0

NOTE.—Country delivery, 20s. per ton extra; lots under 3 cwt. 4s. per cwt. extra, and over 3 cwt. and under 5 cwt., 2s. 6d. per cwt. extra. Cut to sizes, 4s. cwt. extra.

Old lead, ex London area, at Mills.....per ton £9 0 0

PAINTS, &c.

		£	s.	d.
Raw Linseed Oil, in pipes	per gallon	0	2	6
,, ,, ,, in barrels	,,	0	2	8
,, ,, ,, in drums	,,	0	2	11
Boiled ,, ,, in barrels	,,	0	2	9
,, ,, ,, in drums	,,	0	2	11
Turpentine, in barrels	,,	0	3	11
,, in drums (10 galls.)	,,	0	4	1
Genuine Ground English White Lead, per ton (In not less than 5-cwt. casks.)		44	0	0

Extra for 1-cwt. kegs over 5-cwt. casks is 5/9 cwt.

GENUINE WHITE LEAD PAINT.

		£	s.	d.
"Father Thames," "Nine Elms," "Park," "Supremus," "St. Paul's," "Morganawyte," "Polacco," "J" Brand, and other best brands (in 14-lb. tins) not less than 5-cwt. lots	per ton delivered	62	0	0
Red Lead, Dry (packages extra)....	per ton	31	0	0
Best Linseed Oil Putty .....per cwt.		0	13	6
Size. XD quality	fkn.	0	3	0

VARNISHES, &c.

		Per gallon		
Oak Varnish .....Outside		0	14	0
Fine ditto	ditto	0	16	0
Fine Copal	ditto	0	18	0
Pale Copal	ditto	1	0	0
Pale Opal Carriage	ditto	1	4	0
Best ditto	ditto	1	12	0
Floor Varnish	Inside	0	18	0
Fine Pale Paper	ditto	0	18	0
Fine Copal Cabinet	ditto	1	2	0
Fine Copal Flatting	ditto	1	0	0
Hard Drying Oak	ditto	0	18	6
Fine Hard Drying Oak	ditto	0	19	6
Fine Copal Varnish	ditto	1	0	0
Pale ditto	ditto	1	12	6
Best ditto	ditto	1	2	6
Best Japan Gold Size		0	12	0
Best Black Japan		0	10	0
Oak and Mahogany Stain (water)		0	12	6
Brunswick Black		0	7	0
Berlin Black		0	14	0
Knotting (patent)		0	15	0
French and Brush Polish.....		0	12	0
Liquid Dryers in Terebene		0	9	0
Cuirass Black Enamel		0	7	0

GLASS.

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.

	per ft.		per ft.
15 oz. fourths ..	2¾d.	32 oz. fourths	6½d.
15 ,, thirds	2¾d.	32 ,, thirds	8½d.
21 ,, fourths ..	3½d.	Obscured Sheet, 15 oz.	3d.
21 ,, thirds	3¾d.	,, 21 ,,	4½d.
26 ,, fourths ..	4½d.	Fluted, 15 oz. 6½d., 21 Oz. 9d.	
26 ,, thirds	5½d.	Em'lld, 15 oz. 4½d., 21 oz. 5½d.	

Extra price according to size and substance for squares cut from stock.

ENGLISH ROLLED plate in CRATES OF STOCK SIZES.

	Per ft.
Rolled plate ¼ in.	4½d.
Rough rolled ⅜ in.	5½d.
Rough rolled ½ in.	5½d.
Figured, Rolled, Baldc, Oceanic, Arctic, Stippolyte, and small and large Flemish White	5½d.
Ditto, tinted	8d.
Rolled Sheet	4½d.
White Rolled Cathedral	5d.
Tinted ditto	7½d.

Cast plate is same price as rough rolled.

"VITA" GLASS.	Per ft. s.	d.
Clearsheet—not exceeding 1 foot	1	0
Do. do. 2 feet	1	3
Do. over 2 feet	1	9
Polished plate—not exceeding 1 foot	1	6
Do. do. 2 feet	3	0
Cathedral—not exceeding 1 foot	1	0
Do. larger sizes	1	6
Horticultural Sheet and Cathedral "Vita" Glass. Sizes up to 24 inches by 18 inches or not exceeding 3 feet	1	0
3/16 in. Wired Georgian Design. Sizes up to 96 inches long by up to 24 inches wide.....	2	6

THE SCOTTISH BUILDER

NEW BUILDINGS

The Editor would be glad to receive information for publication under this heading from architects, builders, or other persons concerned. Items should be received at THE BUILDER Office not later than Wednesday morning.

ARBROATH.—HOUSES. — The Dean of Guild Court have approved plans for the erection by the T.C. of 24 three-apartment houses on ground at Hill-road and Union-street, East.

BURNTISLAND. — POND. — The Town Council unanimously agreed to proceed with the construction of a swimming pond at a cost not exceeding £10,000.

DUNDEE.—HOUSING.—A recommendation to build 280 houses under the Fleming Trust scheme on a portion of the vacant ground between Scott-street and City-road and east of Balgay Hill is to be submitted to the Town Council by the Housing Committee. The proposal involves the purchase of 38 acres of ground at a cost of £7,500 by the corporation, and the subsequent resale for housing purposes to the Fleming Trust at £6,720.

DUNFERMLINE.—LIBRARY.—The Public Libraries Committee of the T.C. are considering a scheme for a new and up-to-date junior library.

DUNOON.—HOUSES.—The T.C. are considering 56 houses at the Black Park at £20,000.

FALKIRK.—BUILDING.—Plans were passed at the Dean of Guild Court for new buildings to cost £2,100. Mr. John Craigie Armstrong, 114, Main-street, Bainsford, was granted permission to erect four flatted houses at Holly-road, Falkirk, at a cost of £1,800. Grahamstown Iron Co., Ltd., were granted permission to erect a warehouse at £300.

FIFE.—HOUSING.—The C.C. has received sanction to build 60 houses at Thornton from the Department of Health for Scotland.

GRANGEMOUTH.—HOUSING.—Plans were passed at the Dean of Guild Court for the erection of 160 new houses on the Almond Pow area of the burgh. There will be 100 small three-apartments, 44 large three-apartments, and 16 four-apartments, the total cost being approximately £47,000.

HAMILTON.—HOUSES.—Corporation have authorised the erection of new houses at Burnside-lane and Gateshead-street at a cost of £25,000. Messrs. Cullen, Lockhead and Muir, 115, Cadogan-street, Hamilton.

INVERNESS.—HOUSES.—Plans are being prepared for the erection of 104 additional houses for the Town Council. The Department of Health has approved the tenders on the understanding that the houses are completed on a date to be approved by them. The Town Council have agreed to borrow £51,455 for housing purposes.

KIRKCALDY.—HOUSING.—The T.C. have acquired two new sites for housing schemes. Plans for building are in course of preparation. The sites are situated at Park-road and the ground known as Heron's Pottery.

KIRKINTILLOCH.—SCHOOL.—The School Management Committee has agreed to request the Education Authority to proceed with the erection of a new school for Higher Grade pupils in the Kirkintilloch area.

LOSSIEMOUTH.—HOUSING.—The T.C. have decided to purchase the ground at Coulard-hill for erecting houses. The Council are considering a proposal to erect 20 three-roomed houses and 8 four-roomed houses.

LOSSIEMOUTH.—MARKET.—The Harbour Commissioners have unanimously approved of a scheme to build a new fish market along the west side of the new harbour basin, from the bridge to Messrs. Dea's sheds.

PAISLEY.—BUILDING.—The Dean of Guild Court has approved the plans of three R.C. schools to be erected by Renfrew C.C. at Renfrew-road, Marchfield, and Williamsburgh. The Renfrew-road building is to provide accommodation for 700 to 800 advanced division pupils and secondary boys, the Marchfield school is for 1,200 primary pupils, and the other school is for 200 infant and junior pupils. The cost of the new buildings is estimated at between £80,000 and £90,000. The Court also approved plans presented by the T.C. for the erection of a three-story tenement in George-street and of two similar tenements in West-street and Broomlands-street. The new buildings will have a total of 24 houses of two and three apartments. The other linings granted were :—Stimur Manufacturing Co., 4, Macdowall-street, workshop building at Williamsburgh.

STIRLING.—HOUSING.—The Stirling C.C. Housing Committee has arranged for 100 houses to be erected at Westquarter for Standburn people and a similar number of houses for people drawn from Redding and Laurieston districts.

TRANENT.—HOUSING.—At a special meeting of the Town Council the Burgh Surveyor's report on the tenders for the erection of a further 52 houses was submitted. The houses are to be erected on the Northfield site.

Income Tax Booklet.

Tolley's Income Tax Budget Handbook, 1934-35, for both Great Britain and Irish Free State, has been published. This handbook will be found to be clearly printed, and great pains have been taken to make it reliable, concise, and up to date. Price 1s. post free, it can be obtained from 107, Tierney-road, Streatham, S.W.2, or 18, Buckingham-street, Adelphi, W.C.2.

BUILDING TRADE WAGES IN SCOTLAND*

Following are grade rates authorised by the Scottish N.J.C. for Building Industry. Painters by ruling of the Scottish National Painters' and Decorators' Joint Council, have from January 1 new rates. Grade A towns, 1/6 per hour; Grade B, 1/4; Aberdeen has a special rate of 1/5½. The new rate for Plasterers has been fixed at 1s. 6½d. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur.

Grade Classification ...	A	A¹	A²	A³	B	B¹	B²	B³
Craftsmen	1/6	1/5½	1/5	1/4½	1/4	1/3½	1/3	1/2½
Labourers	1/1½	1/1¼	1/0¾	1/0½	1/0	/11⅛	/11¼	11

Aberdeen .....A	Dundee .....A	Hawick .....A²	Perth .....A	
Airdrie .....A	Dumfermline .....A	Helensburgh .....A	Perthshire .....A²	
Alexandria .....A	Dunoon .....A	Inverness .....B	Peterhead .....A²	
Arbroath .....A²	East Lothian ....A	Kilmarnock .....A	Renfrewshire .....A	
Ayrshire .....A	Edinburgh .....A	Kincardineshire ..A²	Rothesay .....A	
Bathgate .....A	Falkirk .....A	Kinross-shire .....A	Roxburghshire ....A²	
Bo'ness .....A	Forfarshire .....A²	Kirkcaldy .....A	St. Andrews .....A	
Broughty Ferry ....A	Fort William .....B	Lanarkshire .....A	Selkirkshire .....A	
Clackmannanshire ..A	Galashiels .....A²	Leith .....A	Stirling .....A	
Coatbridge .....A	Glasgow .....A	Midlothian .....A	Stirlingshire, West A	
Dumbartonshire ....A	Greenock .....A	Motherwell .....A	West Lothian.....A	
Dumfries .....A²	Hamilton .....A	Peeblesshire .....A²	Wishaw .....A	
Dumfriesshire .....A²				

* The information given in this table is copyright. The rates of wages in various towns in England and Wales are given on page 463.

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

		s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	8	9
Add if in clay	„ „	1	0
Add for every additional depth of 6 ft.	„ „	0	6
Planking and strutting to trenches	per foot super	0	3
Do. to sides of excavation, including shoring	„ „	1	0

CONCRETOR.

		s.	d.
Portland cement concrete in foundations 1 to 6	per yard cube	24	3
Add if in underpinning in short lengths	„ „	5	6
Add if in floors 6 in. thick	„ „	2	3
Add if in beams	„ „	2	9
Add if aggregate 1 : 2 : 4	„ „	9	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	„ „	2	0

BRICKLAYER.

		£	s.	d.
Reduced brickwork in lime mortar and Fletton bricks	per rod	27	0	0
Add if in stocks	„	7	0	0
Add if in Staffordshire blues	„	22	0	0
Add if in Portland cement and sand	„	1	5	0

FACINGS.

Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	0	1½

POINTING.

Neat flat struck or weathered joint	„ „	0	0	3

ARCHES.

Extra only to the price of ordinary brickwork :—				
Fair external in half brick rings	„ „	0	0	10
Axed in stocks	„ „	0	0	9
Rubbed and gauged jointed in putty camber or segmental	„	0	6	0

SUNDRIES.

Damp course in double course of slates breaking joint and bedded in Portland cement	„ „	0	0	11
Setting ordinary register grates and stoves	each	1	0	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	„	4	15	0

ASPHALTER.

		s.	d.
Half-inch horizontal damp course	per yard super	4	6
Three-quarter-inch vertical damp course	„ „	9	6
Three-quarter-inch on flats in two thicknesses	„ „	6	0
Angle fillet	per foot run	0	3
Skirting and fillet 6 in. high	„ „	1	0

MASON.

		s.	d.
York stone templates fixed	per foot cube	12	9
York stone sills fixed	„ „	22	0
Bath stone and all labour fixed	„ „	10	6
Beer stone and all labour fixed	„ „	15	0
Portland stone fixed	„ „	15	6
Chilmark stone fixed complete	„ „	16	6

SLATER.

		s.	d.
Welsh 16 in. × 8 in. 3 in. lap. including nails	per square	78	6
Do. 20 in. × 10 in. Do. Do.	„	80	6
Do. 24 in. × 12 in. Do. Do.	„	86	0

CARPENTER AND JOINER.

		s.	d.
Fir framed in plates	per foot cube	4	0
Do. joists	„ „	4	6
Do. roofs, floors and partitions	„ „	5	0
Do. trusses	„ „	7	3

		¾″	1″	1¼″	2″
Deal rough close boarding	per sq.	30/-	35/-	43/-	70/-

Flat centering for concrete floor, including struts or hangers	„	50	0	
Do. to beams	per ft. sup.	0	9	
Centre for arches	„	1	6	
Gutter boards and bearers	„	1	0	

FLOORING.		¾″	1″	1¼″	1½″
Deal-edges shot	per sq.	—	38/-	45/-	52/-
Do. tongued and grooved	„	—	43/-	50/-	58/-
Do. matchings	„	40/-	45/-	—	—
Moulded skirtings, including backings and grounds	per ft. sup.	1/4	1/7	1/9	2/3

SASHES AND FRAMES.		s.	d.
One-and-a-half moulded sashes or casements	per foot super	1	10
Two Do. Do. Do.	„ „	2	1
Add for fitting and fixing	„ „	0	3
Deal cased frames with 1 in. inner and outer linings, 1¼ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares, double hung, double hung with pulleys, lines and weights, average size		3	6

DOORS.		1½″	1¾″	2″
Two-panel square framed	per ft. sup.	2/1	2/3	2/5
Four-panel Do.	„	2/4	2/6	2/9
Two-panel moulded both sides	„	2/6	2/9	2/11
Four-panel Do. Do.	„	2/9	2/11	3/2

CARPENTER AND JOINER—continued.

FRAMES.

		s.	d.
Deal wrot moulded and rebated	per foot cube	12	6

		1″	1¼″	1½″
Plain deal jamb linings framed	per ft. sup.	1/7	1/8	1/11
Deal shelves and bearers	„	1/2	1/4	1/7
Add if cross-tongued	„	2d.	2d.	2d.

STAIRCASES.

	1″	1¼″	1½″	2″	2½″
Deal treads and risers in and including rough brackets	2/1	2/4	2/9	—	—
Deal strings wrot on both sides and framed	1/8	2/-	2/2	2/8	—

		s.	d.
Housings for steps and risers	each	0	11
Deal balusters, 1 in. x 1½ in.	per ft. run	0	9
Mahogany handrail, average 3 in. x 3 in.	„ „	6	0
Add if ramped	„ „	12	0
Add if wreathed	„ „	24	0

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts	8½d.	Rim locks	2/-
Sash fasteners	11½d.	Mortice locks	4/6
Casement fasteners	1/5	Patent spring hinges and letting into floor and making good	19/-
Casement stays	1/2		
Cupboard locks	1/5		

FOUNDER AND SMITH.

		s.	d.
Rolled steel joists	per cwt.	15	0
Plain compound girders	„	18	0
Do. stanchions	„	20	9
In roofwork	„	26	6

RAIN-WATER GOODS.

		3″	4″	5″	6″
Half-round plain rebated joints	ft. run	1/-	1/1	1/3	1/6
Ogee Do. Do.	„	1/2	1/3	1/9	2/3
Rain-water pipes with ears	„	1/3	1/10	—	—
Extra for shoes and bends	each	2/9	3/11	—	—
Do. stopped ends	„	1/1	1/4	1/9	2/6
Do. nozzles for inlets	„	2/2	2/7	3/7	4/-

PLUMBER.

		s.	d.
Milled lead and laying in flashings and gutters	per cwt.	38	0
Do. do. flats	„	37	0
Extra labour and solder in coated cesspools	each	6	9
Welt joint	per ft. run	0	6
Soldered seam	„ „	1	3
Copper nailing	„ „	0	3

		½″	¾″	1″	1½″	2″	4″
Drawn lead waste	per ft. run	1/1½	1/4	1/6½	2/5	2/8	—
Do. service...	„	1/3	1/9	2/-	3/-	—	—
Do. soil	„	—	—	—	—	—	5/9
Bends in lead pipe	each	—	—	—	—	2/6	6/-
Soldered stop ends	„	0/9	1/1	1/6	2/3	2/10	—
Red lead joints	„	0/10	0/11	1/2	1/9	2/1	4/3
Wiped soldered joints	„	2/3	2/9	3/0	3/10	4/10	6/6
Lead traps and cleaning screws	„	—	—	—	10/6	14/-	—
Bib cocks and joints	„	6/4	9/7	14/-	—	—	—
Stop cocks and joints	„	12/4	14/2	20/8	54/-	—	—

PLASTERER.

			s.	d.
Render, float and set in	lime and hair	per yard sup.	2	0
Do. Do.	Sirapite	„ „	2	3
Do. Do.	Keen's	„ „	3	0
Add saw lathing		„ „	1	4
Add metal lathing		„ „	2	4
(Not including hangers or runners, etc., for suspended ceilings.)				
Portland cement screed		„ „	2	2
Do. plain face		„ „	3	3
Mouldings in plaster		per 1 girth	0	1½
One-and-a-half granolithic pavings		per yard sup.	4	6

GLAZIER.

		s.	d.
21-oz. sheet plain	per foot sup.	0	6½
26-oz. Do.	„ „	0	7½
Obscured sheet	„ „	0	8
⅛-in. rolled plate	„ „	0	9
¼-in. rough rolled or cast plate	„ „	0	10
¼-in. wired cast plate	„ „	1	1

PAINTER.

		s.	d.
Preparing and distempering, 2 coats	per yard sup.	0	9
Knotting and priming	„ „	0	7
Plain painting, 1 coat	„ „	0	9
Do. 2 coats	„ „	1	2
Do. 3 coats	„ „	1	9
Do. 4 coats	„ „	2	4
Graining	„ „	2	3
Varnishing twice	„ „	1	9
Sizing	„ „	0	3
Flatting	„ „	0	7
Enamel	„ „	1	1
Wax polishing	per foot sup.	0	6
French polishing	„ „	1	2
Preparing for and hanging paper	per piece 2/- to	4/-	

* These prices apply to *new buildings only*. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. A percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Act, and from 1s. 6d. per £100 for Fire Insurance. The whole of the information given on this page is copyright.

TRADE NEWS

A Paint Cleaner.

We are informed that a free sample of "Manger's Sugar Soap," the paint cleaner, can be had on application to Messrs. J. Manger and Son, Ltd., Dept. B, Kingsland, London, E.8.

An Appointment.

We learn that Mr. Fred Hill, M.I.Struct.E., A.I.Q. (late sales manager, Winget, Ltd.), St. Helens, Bramcote-lane, Wollaton, Nottingham, has joined Mr W. S. Powel, now trading as Messrs. Powel and Hill, Ltd., precision and general engineers and specialists in concrete machinery, 110, Canterbury-road, Croydon, Surrey.

Canadian Lumber Exports.

Canadian lumber exports to Great Britain during the second and current quarters of the year have been greatly in excess of the record exports of 1933. This is one of the signs of general business improvement cited by the Royal Bank of Canada in its September review of the Dominion's business activities. According to the Bank, "an autumn expansion of more than seasonal proportions" may be anticipated.

Trough Lighting Units.

Holophane, Ltd., issue from Elverton-street, Vincent-square, S.W.1, details of their new series of trough lighting units. These units have been designed to meet the modern demand for rectangular types that could be adapted for use in architectural lighting. The new range opens up the possibilities of more efficient lighting with units having specially designed reflectors. Each unit has a special prismatic reflector designed to suit the requirement of the unit. The trough can be advantageously used for concealed lighting in public buildings or residences. Coloured glass fronts are available for those who wish for other than white lighting.

Electric Fires.

The G.E.C. is this season introducing some striking and attractive types of electric fires to meet the demand for chromium-plated reflectors and rod-type elements. In the design and construction of these fires special attention has been paid to the form of contact employed, and also the rod elements and end-caps fitted thereto. The rod elements are of the plug-in type, so that the fitting of the elements is entirely free from the removal of any screws or nuts. It is most important with a plug-in element of this description that the contacts not only make good contact when the fire is new, but also retain their resiliency throughout the life of the fire. To meet this essential requirement, contacts on all "Magnet" fires employing rod elements are manufactured from "Staybrite." The new series comprises three portable models.

WELDING IN BUILDING.

An informal luncheon was given on September 6, at the Clarendon Hotel, Hammersmith, by the British Oxygen Co., Ltd., in connection with the Building Trades Exhibition. Mr. C. Helsby, M.Inst.Struct.E., in a short address, explained the advantages of oxy-acetylene and electric welding. He said tenders were now about to be returned for both methods of welding for the new Bexhill entertainment hall, which would be one of the biggest jobs in this country.

Mr. Ewart S. Andrews said it had taken a long time before they had been able to make the L.C.C. realise that welding was "the thing." He described a new building which had been erected at Stoke Newington, where he had carried out a novel experiment by riveting one half and welding the other.

A visit was then made to the company's stand at Olympia to see a demonstration of welding various parts of the exhibition stand. The method shown seemed to prove conclusively that that form of construction should be a great boon to rapid building work.

TENDERS

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes *accepted*.
† Denotes *provisionally accepted*.
‡ Denotes *recommended for acceptance*.
§ Denotes *accepted subject to modifications*.
¶ Denotes *accepted by H.M. Government Departments*.

Aberdeen.—For a new housing scheme at Seaforth-road and Roslin-street, for the T.C. Mr. Alexander Gardner, Housing Architect, Broad-street, Aberdeen:—

Excavation, brick and mason—
*David Main & Son, Aberdeen ... £12,981 11 1
Joinery, carpentry and ironmongery—
*R. & J. Reid, Ltd., Aberdeen ... 7,392 10 1
Slater—
*John Durnin, Aberdeen 1,145 0 6
Plumber—
*William Barnett, Aberdeen 3,229 12 11
Electrical installation and fittings—
*Stroud & Weir, Aberdeen 394 5 8
Painter work—
*Alexander Mackie, Aberdeen ... 951 3 4
Railings and gates—
*A. & J. Main & Co., Ltd., Glasgow 226 11 3

Altofts (W. Yorks).—For external painting of all Council houses, for U.D.C.:—
*Pacey & Gelsthorpe.

Ashton-under-Lyne.—Additional story to boiler-house and covered passage, for Messrs. Compo, Ltd., soap manufacturers, Albert Works:—
*Wm. Storrs, Sons & Co., Ltd., Stalybridge.

Bath.—Electrical installation at 20 and 21, Kingsmead-square and 1, Monmouth-street, for the T.C.:—
*W. G. Walter (Bath), Ltd. £213

Bath.—Electrical installation in connection with the reconstruction of 28 and 28a, Southgate-street, for the T.C.:—
*S. England £136 15

Bath.—Painting the railings of the High Common, for the T.C.:—
*J. W. Knight & Son £109 13 6

Bath.—Reconstruction work on the Grand-parade, for the T.C.:—
Supply of wrought-iron grills—
*Geo. Mariner, Bath £115 0 0
Supplying and laying terrazzo tile paving—
*Diespeker & Co., Ltd., Birmingham 120 3 6

Bedford.—Six non-parlour type cottages at Eaton Socon, for the R.D.C. Mr. C. W. Smith, architect, 14, St. John's-street, Cambridge:—
E. Brittain, St. Neots £1,719
Townsend Bros. & Watts, St. Neots ... 1,668
*Chas. Smith & Sons, Eaton Socon, St. Neots 1,620

DON'T TENDER UNSUCCESSFULLY
SECURE CONTRACTS WITH

THE STEEL SCAFFOLDING CO., LTD
Imperial House, 86, Regent St., London, W.1
Telephone: Regent 1157

Bentley (Doncaster).—For new elementary Council schools at High-street, for the West Riding County Council. Mr. W. Wormald, Education Architect's Dept., County Hall, Wakefield:—
*T. Jenkinson & Sons (Doncaster), Ltd.

Blackpool.—Shelter and conveniences at Little Bispham, for the C.B.:—
*Keenan & Yates.

Blyth.—Rebuilding of "Queen's Head" hotel. Messrs. J. Oswald & Son, architects, Worswick-street, Newcastle:—
*J. & W. Lowery, Corporation-street, Newcastle.

Blyth Bridge.—Church hall to seat 200 persons for the Church of St. Francis, Rough Close, for the Rev. E. W. Bridgwood, Forsbrook Vicarage:—
*J. H. Broadhurst & Son, Burslem.

Bournemouth.—Erecting the new East Beach municipal café, for the T.C.:—
*Geo. Shears & Sons, Bournemouth ... £13,754
(In lieu of previous tender.)

Bramley (Leeds).—For alterations and additions at the machinery works at Stanningley-road, for the Turner Tanning Machinery Co., Ltd. Messrs. Kirk & Tomlinson, architects, 63, Albion-street, Leeds:—
*Henry Atkinson & Sons, Ltd.

Bridgetown.—Mass concrete retaining wall, for the Somerset C.C. Mr. Edward Stead, A.M.I.C.E., County Surveyor, Ashcombe House Annexe, Milton-road, Weston-super-Mare. Quantities by the County Surveyor:—
*J. W. Burt & Sons, Minehead.

Bridport.—16 houses on "Court Orchard" site, also for new roads and sewers, for the Corporation. Mr. S. Edgar Howard, Town Clerk:—
Sewers—
*Channing & Osmond, Burnham-on-Sea £144 0 0
Houses—
*Channing & Osmond, Burnham-on-Sea 4,680 16 0
Roads—
*Briyey & Good, Parkstone 674 10 4

Bristol.—Houses and shops, for the T.C.:—
144 houses and 4 shops on the Bedminster estate and 142 houses on the Southmead estate—
*Simms, Son & Cooke, Ltd. £44,156 & £42,682
4 houses in Dings area—
*Poole & Sons £1,240

Cheadle and Gatley.—Sub-station on Torkington estate, Gatley, for the U.D.C. Engineer and Manager, 37, High-street, Cheadle:—
*Oldham & Hallworth, Hazel-grove £610

Cheltenham.—Open-air swimming pool at Sandford-park, for the T.C. Mr. G. Gould, Marsland, Borough Engineer:—
*S. Jackaman & Son, Ltd., Slough ... £12,086

Chinley.—Rebuilding of the Forge Bleach Works, for Messrs. J. & J. Hadfield, Ltd., 56, Faulkner-street, Manchester:—
*J. W. Swindells, Ltd., New Mills, near Stockport.

Cirencester.—23 houses on the Bowling Green site, for the U.D.C.:—
*Messrs. Kear £6,680

Cirencester.—Painting Council's houses in Siddington-road, for the U.D.C.:—
*Fletcher & Wilkie £108 6 6

Crompton.—Exterior painting of 78 houses, for the U.D.C. Mr. F. T. Jones, engineer and surveyor:—
*Geo. Whitehead, Ironmonger-lane, Oldham.

Darlington.—Extensions to the Darlington Training College. Messrs. J. Potts & Son, architects, 57, John-street, Sunderland:—
*G. Dougill & Sons, Chestnut-street, Darlington.

Daventry.—For erection of 18 houses at Flore, 33 at Weldon Beck and 6 at Staverton:—
‡Sabin & Young, Walsall £18,288

Dewsbury.—For 74 houses on the Heckmondwike-road site, for the T.C.:—
Mason—
*J. Donovan £8,563 18 3
Joiners—
*S. Armitage & Sons, Ltd. 4,451 10 10
Plumber—
*Albert Scott 2,630 1 0
Slaters—
*W. R. Thompson & Co. 1,551 1 0
Plasterers—
*John Gill 1,187 3 0
Painter—
*F. Barnett 331 0 0
(Subject to M.H. approval.)

Dewsbury.—For 30 houses on the Scopsley-lane site, Whitley, for the T.C.:—

Mason—
*A. C. Smith £3,811 10 2
Joiner—
*S. Armitage & Sons, Ltd. 1,874 17 0
Plumber—
*Albert Scott 1,076 10 6
Slaters—
*W. R. Thompson & Co. 614 1 5
Plasterers—
*John Gill 484 5 9
Painter—
*F. Barrett 143 0 0
(Subject to M.H. approval.)

Durham.—37 houses at Sherburn-hill, for the R.D.C. Mr. Pescod, Housing Architect, Byland Lodge:—

*G. M. Pearson, 49, Lyons-terrace, Hetton-le-Hole £10,899

Durham.—Additions to the Quarrington Hill Workmen's Club and Institute:—

*Sanderson & Son, Coxhoe, Durham.

Edinburgh.—Painting works at Rose-street, for Messrs. Maclennan & Cunningham, architects, 47, Melville-street, Edinburgh:—

Excavation, brick and mason works—*Mac-Andrew & Marshall, Ltd., 6, West End-place, Edinburgh.

Garesfield.—Sports pavilion at the colliery. Mr. E. Graham, architect, Coal Trade Offices, Newcastle-on-Tyne:—

*R. C. Williamson, Rowlands Gill £740

Gateshead-on-Tyne.—For alterations to the Congregational Church, Bensham-road. Mr. R. Burke, architect, Grey-street, Newcastle-upon-Tyne:—

*Walter Wilson (Gateshead), Ltd., Gateshead.

Glasgow.—For reinforced concrete bridge at Belmore-road. Mr. Thomas Somers, City Engineer, Office of Public Works, Glasgow:—

*Sir William Arrol & Sons, Ltd., Dalmarnock Works, Glasgow £23,492

Glasgow.—For 34 houses at West Crayton extension scheme, for the T.C. Mr. William McNab, Housing Architect, Director's Office, Trongate, Glasgow:—

Excavation, brick and mason—
*Hugh McDougall & Son, Glasgow £3,497 16 5
Joinery, carpentry and ironmongery—
*William Vernal, Renfrew 3,562 12 9
Slater works—
*A. C. White & Co., Ltd., Carmyle 1,067 9 2
Plumber work—
*Robert S. Renfrew & Son, Glasgow 1,680 12 0
(Other contracts let.)

Gomersal.—For erection of 42 houses at Woodlands-road, for the U.D.C.:—

*Kilbride & Wilson.

Halesowen.—Three houses at Toys-lane, Cradley, for the R.D.C.:—

*C. E. Byng, Hasbury £1,011 7 7

Hastings.—For the erection of new casual wards at the Municipal Hospital:—

*R. Cook & Sons, Ltd., Crawley £5,473 0 0

Ilford.—Roads and sewers at Claybury Park estate. Messrs. Atkinson & Marler, estate agents and surveyors, Claybury Park estate office, Woodford-avenue, Ilford. Mr. E. Russell, P.A.S.I., quantity surveyor:—

Stroud £13,940 13 7
Fitzpatrick 13,066 0 7
Wimpey 12,910 7 5
Constable Hart 12,634 2 11
Bridgwater 12,563 3 8
French 12,390 0 0
Sir William Prescott 11,434 1 0
*Cronk 11,365 0 0

Keighley.—Warehouse on Warehouse Bridge, Stockbridge, near Keighley, for the Leeds and Liverpool Canal Co., Pall Mall, Liverpool. Mr. Robert Davidson, chief engineer:—

*T. Obank & Sons, Ltd., Bradford.

Larbert.—For new workshops at the Royal Scottish National Institution. Mr. James Miller, architect, 15, Blytheswood-square, Glasgow:—

Excavation, brick and mason work, etc.—*Duncan Stewart (Bonnybridge), Ltd., Bonnybridge.

Leeds.—For structural alterations to the Bridewell portion of the Town Hall, for the T.C.:—

*Hy. Atkinson & Sons, Ltd.

Leeds.—For alterations and additions at the Leeds Boys' Grammar School, Moorland-road, Hyde Park, for the Governors. Mr. G. W. Atkinson, architect, St. John's House, Merrion-street, Leeds:—

*Saml. Flockton.

Leicester.—Farm buildings at Frith Home for Mental Defectives, for the T.C. City Surveyor:—

*J. C. Kellett & Son, Southgate-street, Leicester £7,250

Leighton Buzzard.—Isolation block, etc., at Grove Isolation Hospital, Linslade, Leighton Buzzard, for the North Buckinghamshire Joint Hospital Board. Mr. H. A. Rolls, F.S.I., L.R.I.B.A., architect, 15, Bridge-street:—

J. J. Sugars & Sons, Luton £2,834 15
Fleet & Roberts, Ltd., Aylesbury ... 2,432 0
Exors. A. E. Dawson, Leighton Buzzard 2,377 0
*D. Cook & Sons, 1, High-street, Leighton Buzzard 2,206 0

London.—Provision of lockers and additional dressing accommodation at the open-air baths, for the Lewisham B.C.:—

A. T. Peyton £2,350
A. J. Glock, Ltd. 1,964
H. & J. Taylor 1,930
James Watt (Catford), Ltd. 1,848
*Walker, Clinging & Co. 1,794

¶**London.** — Tenders accepted by H.M. Air Ministry for the week ended August 25:—

Mechanical stokers, Prior Burners, Ltd., Crown-yard, Stanhope-street, N.W.1.
Officers' mess and quarters, Lee-on-Solent, John Hunt, Ltd., Cleveland-road, Gosport.
Sergeants' Mess, ration store, etc., Catterick, Geo. Dougill & Sons, Chestnut-street, Darlington.
Underground cables, Duxford, Malcolm & Allan, Ltd., 12, Henrietta-street, W.C.2.

¶**London** —Tenders accepted by H.M.O.W for the week ended September 6:—

General Post Office, North—execution of marble work—J. Whitehead & Sons, Ltd., Imperial Works, Kennington Oval, S.E.11.
Hounslow L.R.O.—erection—Commercial Structures, Ltd., 61, City-road, E.C.1.
Keighley E.E.—erection—O. Atkinson & Sons, Tower Works, Tower-street, Harrogate.
Birmingham, Head Post Office—external and internal painting works—J. E. Harper & Son, Ltd., 72/82, Lombard-street, Birmingham, 12.
Pembroke Employment Exchange—adaptations—W. H. Phillips & Son, Warren-street, Tenby.
H.M. Stationery Office, Harrow—wood block paving—Stevens & Adams, Ltd., Victoria Works, Point Pleasant, S.W.18.
Typists' tables—Wake & Dean, Ltd., Yatton, near Bristol.
Tables, half pedestal; top units, drawer pedestals; end panels; pedestal bookracks and end fillers—Art Metal Construction Co., 199/203, Buckingham Palace-road, S.W.1.

MARBLE

NEW IDEAS
IN THE OLD
PIONEERS
IN THE NEW

JOHN STUBBS & SONS
WORKS
LONDON & LIVERPOOL

Government Laboratory, Clement's Inn, W.C.2—extension—F. R. Hipperson & Son, Ltd., 6, Broad-street-place, E.C.2.
Somerset House, East Wing—electric passenger lift—Newbury & Thomas, Lion Works, Wagner-street, S.E.15.
Tables, repetition—Shapland & Potter, Ltd., Raleigh Works, Barnstaple.
Washstands — Wake & Dean, Ltd., Yatton, nr. Bristol.
Dressing chests—Zinkins, 203, Mare-street, Hackney, E.8
Birmingham B.P.O., Corporation-street.—alterations, etc.—J. E. Harper & Son, Ltd., 72/82, Lombard-street, Birmingham.

London.—Repaving the sidewalks and the retiling of the second-class bath at Forest Hill, for the Lewisham B.C.:—

A. T. Peyton £1,400 0
Bell Decorations 1,353 0
A. J. Glock, Ltd. 1,015 0
H. & J. Taylor 963 0
South Eastern Contractors, Ltd. ... 907 10
F. W. Barratt & Co. 893 10
James Watt (Catford), Ltd. 817 0
*Granite Paving Co., Ltd. 789 8

Louth.—50 houses, and roads, etc., on the Brackenboro'-road site, for the T.C. Mr. C. H. Allison, Borough Surveyor:—

Houses—
A. W. Hook, Grimsby £14,678
Thompson & Son, Grimsby 14,000
W. Firth, Ltd., Doncaster 14,000
Winton Construction Co., Louth 13,892
Tuxworth & Son, Louth 12,732
Metcalf Bros., Doncaster 12,730
J. P. Cartledge, Grimsby 12,720
Steel & Goddard, Grimsby 11,828
G. W. Horton & Son, Horncastle ... 11,828
*F. Houlton & Co., Nottingham 11,732

Roads and sewers—
A. W. Hook, Grimsby 3,574
Metcalf Bros., Doncaster 2,987
Tuxworth & Son, Louth 2,723
G. H. Harton & Son, Horncastle 2,665
Winton Construction Co., Louth 2,298
Thompson & Sons, Grimsby 2,273
W. Firth, Ltd., Doncaster 2,200
*Smith Wright & Co., Asfordby, Melton Mowbray 1,937

Maltby.—Parish hall in Blythe-road, for the Parochial Council of the Parish Church. Mr. Morgan R. Jones, architect:—

*Mollekin Bros., Maltby, near Rotherham.

Near Pontypool.—Pithead baths at Hafodyrynys Colliery, for the Miners' Welfare Committee, Romney House, Marsham-street, Westminster, S.W.1. Mr. J. A. Dempster, architect:—

*W. Miles & Sons, Mount Pleasant-road, Ebbw Vale (Mon.).

Newcastle.—Warehouse and store in Ellison-place, for the North-Eastern Electric Supply Co., Ltd., Carliol House, Newcastle. Messrs. L. J. Couves & Partners, architects, Carliol House, Newcastle:—

*Trussed Concrete Steel Co., Thames House, Millbank, London, S.W.1.

Newcastle-on-Tyne.—Additions to the "Cradle Well" hotel, for Messrs. R. Deuchar, Ltd. Mr. S. H. Lawson, architect, Emerson-chambers, Newcastle:—

*J. & W. Lowry, Corporation-street, Newcastle.

Newcastle-on-Tyne.—Extensions to Messrs. A. E. Cook, Ltd.'s wholesale drapery premises at 7, Saville-place, Newcastle. Messrs. Hetherington & Wilson, architects, County-chambers, Westgate-road, Newcastle:—

*S. Miller, Ltd., 17, North-street, Newcastle.

Oxford.—For the erection of 120 houses on the Marston housing site, for the T.C.:—

‡Harris Bros., Marehay £39,400

Paisley.—For new building, for Co-operative Society, Ltd. Mr. Hamilton Neil, architect, 163, St. Vincent-street, Glasgow:—

Excavation, brick and mason works, etc.—*John Crawford, 34, Canal-street, Paisley.

Peebles.—For new Bank of Scotland. Messrs. Cairns & Ford, architects, 63, George-street, Edinburgh:—

Excavation, brick and mason—*Tod & Co., Peebles.
Steel—*Redpath, Brown & Co., Ltd., Glasgow.
Joinery, ironmongery and carpentry—*Thomas Murray, Peebles.
Glazier—*Cunningham, Dickinson & Walker, Edinburgh.
Plaster—*L. Grandison & Son, Peebles.
Slater—*William Fairburn & Sons, Peebles.
(Other contracts let.)

Rochdale.—Nursery school on the site of premises in South-street, for the Voluntary Committee. Messrs. Butterworth & Duncan, architects, 2, Baillie-street:—

Builders—*Thos. Wilkinson & Son (Rochdale), Ltd.
Demolition and rebuilding—*John Ashworth.
Plumbing—*Rochdale Plumbing Co., Ltd.
Slating—*John Whitworth & Sons.
(All of Rochdale.)
(Estimated cost, £1,500.)

Sheffield.—Traction sub-station in Ridgeway-road, for the T.C. :—
*W. Malthouse, Ltd., Sheffield £1,183

Stretford.—25 bathrooms and installation of baths therein at certain houses on the Lacy-street estate, for the T.C. :—
‡J. & H. Rogerson, Stretford £747 10

Stretford.—Exterior painting and renovating of blocks of property, totalling 393 houses, for the T.C. :—
132 houses, Lostock estate—
‡J. Jackson, Stretford £293 14
86 houses, Moss-road—
‡S. Pearson, Urmston 192 2
51 houses, Moss-road—
‡H. Storer, Moss Side 117 6
70 houses, Gorse-park—
‡J. Hartland, Stretford 157 10
48 houses, Gorse-park—
‡E. Yates, Trafford-park 100 16

Sunderland.—Alterations and additions to the premises of the Sunderland Mantle & Gown Co., Ltd., 53, John-street :—
*J. Huntley & Sons, Marion-street, Sunderland.

Thurnscoe (Yorks).—For 50 bungalows at Low Grange, for the U.D.C. :—
*Direct Labour £10,400

Tollcross.—For new institute and halls at Anworth-street. Mr. John Easton, architect, 246, West George-street, Glasgow :—
Excavation, brick and mason works—*Robert Bruce & Sons, Anworth-street, Tollcross.

Truro.—Alterations and adapting the old Truro Congregational Church for use as offices and Council Chamber, for the R.D.C. :—
*J. C. Harris, Probus £1,685

Warrington.—For extensions, for Whyman's Foundry Co., Ltd., Dallam-lane :—
Builders—*Williams, Tarr & Co., Ltd., Warrington.
Steel erectors—*Whitnall & Gregory, Ltd., Ellesmere Port, Cheshire.

Whitefield.—For rebuilding the "Welcome" inn, Bury New-road, for Messrs. Joseph Holt, Ltd., Derby Brewery, Cheetham, Manchester. Mr. N. Hartley Hacking, architect, 5, Blackfriars-street, Manchester :—
*John Tinline & Sons, Ltd., Bury.

Whitley (W. Yorks).—For erection of recreation and dining block at the sanitorium, for the Health Committee of the Dewsbury Corporation :—
Mason's work—
*A. C. Smith £155 18 8
Joiner's work—
*S. Armitage & Sons 189 0 0
Plumber—
*J. Shepley 26 12 6
Slaters—
*Pickles Bros., Ltd. 55 10 6
Painters—
*J. A. Schonah, Ltd. 19 16 0

Wilts.—Widening of Trowle bridge and approaches, for the C.C. Mr. H. S. Ganderton, County Surveyor, County Offices, Trowbridge :—
‡H. Isley, Bythesea-road, Trowbridge.

Winchcombe.—For the extension of water mains from Southam to the Newlands :—
*C. Minett £877

Winchester.—One pair of bungalows and one pair of two-story houses at Owslebury, for the R.D.C. Mr. W. R. Cowell, architect and surveyor, "Ryelands," Hedge End, Southampton. Quantities by the architect and surveyor :—
*T. J. Hodder, Butlocks Heath, Netley Abbey £988 17 6

Building Trade Economics.

A satisfactory point which emerges from the monthly estimates of building work compiled by the *Board of Trade Journal* is that "plans passed by 146 local authorities in Great Britain, estimated cost" show an increase for the month of nearly 9 per cent., in regard to general contracting. The position to-day, as compared with July, 1933, is nearly 60 per cent. better. Housing in the month of July underwent a slight set-back, and a 1.6 increase in unemployment was also recorded.

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